

## SEARCH REQUEST FORM

Requestor's

Name: \_\_\_\_\_

Serial

Number: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Art Unit: \_\_\_\_\_

## Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

## STAFF USE ONLY

Date completed: 01-29-03Searcher: Beverly E 4999Terminal time: 20

Elapsed time: \_\_\_\_\_

CPU time: \_\_\_\_\_

Total time: \_\_\_\_\_

Number of Searches: \_\_\_\_\_

Number of Databases: 2

## Search Site

STIC

CM-1

Pre-S

## Type of Search

N.A. Sequence

A.A. Sequence

Structure

Bibliographic

## Vendors

IG Suite

☒ STN☒ Dialog

APS

Geninfo

SDC

DARC/Questel

Other

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09/308192

FILE 'REGISTRY' ENTERED AT 09:38:30 ON 29 JAN 2003

=&gt; e lam/cn 5

E1	1	LALIOSIDE HEPTAACETATE/CN
E2	1	LALMIN D/CN
E3	0 -->	LAM/CN
E4	1	LAM 162/CN
E5	1	LAM 163/CN

-key terms

=&gt; e manlam/cn 5

E1	1	MANKOSOL/CN
E2	1	MANKUPROX/CN
E3	0 -->	MANLAM/CN
E4	1	MANN AF-22/CN
E5	1	MANNA GUM/CN

=&gt; e lipoarabinomannan/cn 5

E1	1	LIPOAMIDE REDUCTASE/CN
E2	1	LIPOAMIDE-KOJIC ACID MIXT./CN
E3	0 -->	LIPOARABINOMANNAN/CN
E4	1	LIPOATE/CN
E5	1	LIPOATE ACETYLTRANSFERASE/CN

=&gt; e mycolic acid/cn 5

E1	1	MYCOLATE METHYLTRANSFERASE/CN
E2	1	MYCOLATE SYNTHETASE/CN
E3	1 -->	MYCOLIC ACID/CN
E4	1	MYCOLIC ACID CYCLOPROPANATING ENZYME/CN
E5	1	MYCOLIC ACID CYCLOPROPANE SYNTHETASE/CN

=&gt; s e3

L1 1 "MYCOLIC ACID"/CN

=&gt; e peptidoglycan/cn 5

E1	1	PEPTIDOGLUTAMINASE I/CN
E2	1	PEPTIDOGLUTAMINASE II/CN
E3	1 -->	PEPTIDOGlyCAN/CN
E4	1	PEPTIDOGlyCAN ACETYLATION (BACILLUS HALODURANS STRAIN C-125 GENE GCPE)/CN
E5	1	PEPTIDOGlyCAN ACETYLATION PROTEIN (AGROBACTERIUM TUMEFACIENS STRAIN C58 GENE GCPE)/CN

=&gt; s e3

L2 1 PEPTIDOGlyCAN/CN

=&gt; e mdp/cn 5

E1	1	MDO-101/CN
E2	1	MDOPEFB/CN
E3	4 -->	MDP/CN
E4	1	MDP 12/CN
E5	1	MDP 14/CN

=&gt; s e3

L3 4 MDP/CN

=&gt; e arabinogalactan/cn 5

E1	1	ARABINOFURANURONIC ACID, 1-(4-AMINO-2-OXO-1(2H)-PYRIMIDINYL)-1-DEOXY-, .BETA.-D-/CN
E2	1	ARABINOFURANURONIC ACID, 2-(DECAHYDRO-1,4,4-TRIMETHYL-

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8-METHYLENE-1-AZULENYL)-2,3-DIDEOXY-3-(HYDROXYMETHYL)-  
, METHYL ESTER, STEREOISOMER/CN

E3 1 --> ARABINOGALACTAN/CN  
E4 1 ARABINOGALACTAN ENDO-1,3-.BETA.-GALACTOSIDASE/CN  
E5 1 ARABINOGALACTAN ENDO-1,4-.BETA.-GALACTOSIDASE/CN

=> s e3  
L4 1 ARABINOGALACTAN/CN

=> e gmpd/cn 5  
E1 1 GMP-RA 771/CN  
E2 1 GMP-REDUCTASE GMR-1 (ONCHOCERCA VOLVULUS MOLTING LARVA  
GENE GMR-1 ISOENZYME GMR-1)/CN  
E3 0 --> GMPD/CN  
E4 1 GMR 235/CN  
E5 1 GMR 5000/CN

=> e "n-acetylglucosaminyl-n-acetylmuramyl-l-alanyl-d-isoglutamine"/cn 5  
E1 1 N-ACETYLGLUCOSAMINYL-.BETA.-D-XYLOSE/CN  
E2 1 N-ACETYLGLUCOSAMINYL-N-ACETYLMURAMYL-L-ALANYL-D-GLUTAM  
YL-L-LYSYL-D-ALANYL-D-ALANINE UNDECAPRENOL PYROPHOSPHA  
TE/CN  
E3 1 --> N-ACETYLGLUCOSAMINYL-N-ACETYLMURAMYL-L-ALANYL-D-ISOGLU  
TAMINE/CN  
E4 1 N-ACETYLGLUCOSAMINYL-PHO SPHATIDYLINOSITOL BIOSYNTHETI  
C PROTEIN (METHANOSARCINA ACETIVORANS STRAIN C2A GENE  
MA0798)/CN  
E5 1 N-ACETYLGLUCOSAMINYL-PHO SPHATIDYLINOSITOL BIOSYNTHETI  
C PROTEIN SPT14 (METHANOSARCINA ACETIVORANS STRAIN C2A  
GENE MA3756)/CN

=> s e3  
L5 1 N-ACETYLGLUCOSAMINYL-N-ACETYLMURAMYL-L-ALANYL-D-ISOGLUTAMI  
NE/CN

=> e mapg/cn 5  
E1 1 MAPEX 7/CN  
E2 1 MAPEX D/CN  
E3 0 --> MAPG/CN  
E4 1 MAPH/CN  
E5 1 MAPHARSAL/CN

=> e "mycolyl-arabinogalactan-peptidoglycan"/cn 5  
E1 1 MYCOLOYLTRANSFERASE/CN  
E2 1 MYCOLUTEIN/CN  
E3 0 --> MYCOLYL-ARABINOGALACTAN-PEPTIDOGLYCAN/CN  
E4 1 MYCOLYLTRANSFERASE, TREHALOSE 6-MONOMYCOLATE-TREHALOSE  
/CN  
E5 1 MYCOLYLTRANSFERASE, TREHALOSE 6-MONOMYCOLATE-TREHALOSE  
(MYCOBACTERIUM TUBERCULOSIS GENE RV3804C PRECURSOR)/C  
N

=> e "arabinogalactan, mycolic acid-peptidoglycan"/cn 5  
E1 1 ARABINOGALACTAN SULFATE/CN  
E2 1 ARABINOGALACTAN SULFONIC ACID/CN  
E3 0 --> ARABINOGALACTAN, MYCOLIC ACID-PEPTIDOGLYCAN/CN  
E4 1 ARABINOGALACTAN-CONTAINING GLYCOPROTEIN (ARABIDOPSIS T  
HALIANA GENE AGP1)/CN

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E5 1 ARABINOGALACTAN-CONTAINING GLYCOPROTEIN (ARABIDOPSIS T  
HALIANA GENE AGP10)/CN

=> s l1 or l2 or l3 or l4 or l5  
L6 8 L1 OR L2 OR L3 OR L4 OR L5

FILE 'HCAPLUS' ENTERED AT 09:44:01 ON 29 JAN 2003

L1 1 SEA FILE=REGISTRY ABB=ON PLU=ON "MYCOLIC ACID"/CN  
L2 1 SEA FILE=REGISTRY ABB=ON PLU=ON PEPTIDOGLYCAN/CN  
L3 4 SEA FILE=REGISTRY ABB=ON PLU=ON MDP/CN  
L4 1 SEA FILE=REGISTRY ABB=ON PLU=ON ARABINOGALACTAN/CN  
L5 1 SEA FILE=REGISTRY ABB=ON PLU=ON N-ACETYLGLUCOSAMINYL-N-  
ACETYLMURAMYL-L-ALANYL-D-ISOGLUTAMINE/CN  
L6 8 SEA FILE=REGISTRY ABB=ON PLU=ON L1 OR L2 OR L3 OR L4  
OR L5  
L7 16026 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 OR LAM OR MANLAM OR  
LIPOARABINOMANNAN OR LIPO(W) (ARABINOMANNAN OR ARABINO  
MANNAN) OR LIPOARABNO MANNAN OR MYCOLIC OR PEPTIDOGLYCAN  
OR PEPTIDO GLYCAN OR MDP OR ARABINOGALACTAN OR ARABINO  
GALACTAN OR GMPD OR MAPG  
L8 45 SEA FILE=HCAPLUS ABB=ON PLU=ON ((ACETYLGLUCOSAMINYL?  
OR (AC OR ACETYL) (W)GLUCOSAMINYL?) (S) (ACETYLMURAMYL? OR  
(ACETYL OR AC) (W)MURAMYL?)) (S) (ISOGLUTAMINE OR (I OR  
ISO) (W)GLUTAMINE)  
L9 1344 SEA FILE=HCAPLUS ABB=ON PLU=ON (L7 OR L8) AND (MYCOBACT  
ER? OR (MYCOBACTER? OR M) (W) (TUBERCULOSIS OR VACCAE OR  
BOVIS) OR BCG OR CALMETTE GUERIN)  
L10 269 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND (TREAT? OR  
THERAP? OR PREVENT?)  
L11 38 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND ADMIN?  
L16 17 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND (DISEAS? OR  
DISORDER OR IDDM OR DIABET? OR THROIDIT? OR GASTRITIS OR  
ANAEM? OR ADDISON? OR VULGARIS OR PEMPHIGOID? OR MS OR  
SCLEROSIS OR RA OR ARTHRITIS OR LUPUS OR OPHTHALMIA OR  
SLE OR UVEITIS OR THROMBOCYTOPEN? OR THROMBO CYTOPEN?)  
L17 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND (LEU!OPEN? OR  
CIRRHOSIS OR HEPATITIS OR COLITIS OR SJOGREN? OR  
DERMATOMYOSIT? OR DERMATO MYOSIT? OR SCLERODERM?)  
L18 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 OR L17

L18 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:907161 HCAPLUS

DOCUMENT NUMBER: 138:13500

TITLE: Superantigen-glycolipid conjugates loaded onto  
antigen presening cells for adoptive  
immunotherapy of neoplastic and infectious  
**diseases**

INVENTOR(S): Terman, David S.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 167 pp.  
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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Searcher : Shears 308-4994

misspelled;  
See L32



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US 2002177551 A1 20021128 US 2001-870759 20010530  
PRIORITY APPLN. INFO.: US 2000-208128P P 20000531

AB The present invention comprises compns. and methods for **treating** a tumor or neoplastic **disease** in a host, The methods employ conjugates comprising superantigen polypeptides, nucleic acids with other structures that preferentially bind to tumor cells and are capable of inducing apoptosis. Also provided are superantigen-glycolipid conjugates and vesicles that are loaded onto antigen presenting cells to activate both T cells and NKT cells. Cell-based vaccines comprise tumor cells engineered to express a superantigen along with glycolipids products which, when expressed, render the cells capable of eliciting an effective anti-tumor immune response in a mammal into which these cells are introduced. Included among these compns. are tumor cells, hybrid cells of tumor cells and accessory cells, preferably dendritic cells. Also provided are tumoricidal T cells and NKT cells devoid of inhibitory receptors or inhibitory signaling motifs which are hyperresponsive to the the above compns. and lipid-based tumor assocd. antigens that can be **administered** for adoptive immunotherapy of cancer and infectious **diseases**.

L18 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:555370 HCAPLUS

DOCUMENT NUMBER: 137:108298

TITLE: The method of **treating** human immunodeficiency virus (HIV) **disease** /infection

INVENTOR(S): Khamar, Bakulesh Mafatlal; Modi, Indravadan Ambalal

PATENT ASSIGNEE(S): India

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002056906	A2	20020725	WO 2002-IB97	20020117
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: IN 2001-MU49 A 20010117

AB Human immunodeficiency virus causes depletion of CD4 cells. The depletion of CD4 cells results in decrease in immunity of an infected individual. Due to decrease immunity various opportunistic infections occur. These infections are cause for morbidity and mortality in HIV infected individuals. The **treatment** of HIV these includes antiretroviral drugs. These drugs have their own

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side effects and immune reconstitution achieved is delayed and slow. Various attempts have been made to improve CD4 count, use of IL-2 is one of them. It is assocd. with systemic side effects during the period of its **administration**. The present invention provides method of using **mycobacterium** w for the management of HIV. According to present invention **Mycobacterium** w when given intradermally is effective in prophylaxis and **treatment** of AIDS or AIDS related complex (ARC). It is found to improve immunity as well as CD4 count. It is found to eliminate symptoms like fever, diarrhea. The effect is seen even when no antiretrovirals are used.

IT **53678-77-6**, Muramyl dipeptide  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(method of **treating** human immunodeficiency virus **disease/infection**)

L18 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2001:687323 HCAPLUS  
DOCUMENT NUMBER: 135:240917  
TITLE: Urease-based vaccine and **treatment** for Helicobacter infection  
INVENTOR(S): Michetti, Pierre; Corthesy-Theulaz, Irene; Blum, Andre; Davin, Catherine; Haas, Rainier; Kraehenbuhl, Jean-pierre; Saraga, Emilia  
PATENT ASSIGNEE(S): Oravax, Inc., USA  
SOURCE: U.S., 26 pp., Cont.-in-part of U. S. 5,972,336.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6290962	B1	20010918	US 1994-200346	19940223
US 5972336	A	19991026	US 1993-85938	19930706
CA 2184057	AA	19950831	CA 1995-2184057	19950223
WO 9522987	A1	19950831	WO 1995-US2202	19950223
W:	AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA			
RW:	KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9519681	A1	19950911	AU 1995-19681	19950223
AU 694195	B2	19980716		
EP 751786	A1	19970108	EP 1995-912583	19950223
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE			
HU 75374	A2	19970528	HU 1996-2310	19950223
BR 9506884	A	19970819	BR 1995-6884	19950223
JP 09509661	T2	19970930	JP 1995-522429	19950223
PL 179149	B1	20000731	PL 1995-316007	19950223
NO 9603508	A	19961021	NO 1996-3508	19960822
FI 9603281	A	19961022	FI 1996-3281	19960822
US 2003007980	A1	20030109	US 2001-955739	20010918

Searcher : Shears 308-4994

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PRIORITY APPLN. INFO.:

US 1992-970996 B2 19921103  
US 1993-85938 A2 19930706  
US 1994-200346 A 19940223  
WO 1995-US2202 W 19950223

AB The invention concerns a method of eliciting in a mammalian host a protective immune response to Helicobacter infection and **treatment** of Helicobacter infection by **administering** to the host an immunogenically effective amt. of a Helicobacter urease or urease subunits as antigen. Vaccine compns. are also provided.

IT **53678-77-6**, Muramyl dipeptide **53678-77-6D**, Muramyl dipeptide, derivs.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(as mucosal adjuvant of Helicobacter urease vaccine)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:880993 HCAPLUS

DOCUMENT NUMBER: 134:41096

TITLE: Methods and compounds for the **treatment** of immunologically-mediated **diseases** using **Mycobacterium vaccae**

INVENTOR(S): Watson, James D.; Tan, Paul L. J.; Prestidge, Ross L.

PATENT ASSIGNEE(S): Genesis Research & Development Corporation Limited, N. Z.

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000074715	A1	20001214	WO 2000-NZ85	20000601
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6350457	B1	20020226	US 1999-449013	19991124
EP 1181051	A1	20020227	EP 2000-937399	20000601
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO			
BR 2000011239	A	20020402	BR 2000-11239	20000601
JP 2003501400	T2	20030114	JP 2001-501249	20000601
PRIORITY APPLN. INFO.:			US 1999-137112P	P 19990602
			US 1999-449013	A 19991124

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WO 2000-NZ85 W 20000601

AB Methods for the **prevention and treatment** of **disorders**, including **disorders** of the respiratory system, such as infection with **mycobacteria** such as (**M. tuberculosis**) or (**M. avium**), sarcoidosis, asthma, allergic rhinitis and lung cancers are provided, such methods comprising **administering** a compn. comprising at least one deriv. of delipidated and deglycolipidated (**M. vaccae**) cells.

IT **9036-66-2, Arabinogalactan**

RL: REM (Removal or disposal); PROC (Process)  
(delipidated and deglycolipidated **Mycobacterium vaccae** for **treatment** of immunol.-mediated diseases)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:534966 HCAPLUS

DOCUMENT NUMBER: 133:140213

TITLE: Non-invasive vaccination through the skin

INVENTOR(S): Cevc, Gregor; Chopra, Amla

PATENT ASSIGNEE(S): Idea A.-G., Germany

SOURCE: PCT Int. Appl., 79 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000044349	A1	20000803	WO 2000-EP597	20000126
W: AU, BR, CA, CN, HU, JP, KR, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1031346	A1	20000830	EP 1999-101479	19990127
EP 1031346	B1	20020502		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 216875	E	20020515	AT 1999-101479	19990127
ES 2173678	T3	20021016	ES 1999-101479	19990127
EP 1146858	A1	20011024	EP 2000-906231	20000126
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 2000007749	A	20011113	BR 2000-7749	20000126
JP 2002535350	T2	20021022	JP 2000-595653	20000126
PRIORITY APPLN. INFO.:			EP 1999-101479 A	19990127
			WO 2000-EP597 W	20000126

AB The present invention relates to novel vaccines for the non-invasive, transcutaneous **administration** of antigens assocd. with ultradeformable carriers, for the purpose of prophylactic or **therapeutic** vaccination. The vaccines comprise (a) a transdermal carrier which is a penetrant, (b) a compd. which specifically releases or specifically induces cytokine or anti-cytokine activity or exerts such an activity itself, and (c) an antigen, an allergen, a mixt. of antigens an/or mixt. of

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allergens. The invention further relates to methods for the vaccination of mammals for obtaining a protective or **therapeutic** immune response.

IT 53678-77-6, Muramyl dipeptide

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (non-invasive vaccination through the skin)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:475560 HCAPLUS

DOCUMENT NUMBER: 133:109949

TITLE: Pharmaceutical compositions for **treatment** of **diseased** tissues

INVENTOR(S): Lee, Clarence C.; Lee, Feng-Min

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2000040269	A2	20000713	WO 2000-US191	20000105
WO 2000040269	A3	20001130		
W: AU, CA, CN, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

PRIORITY APPLN. INFO.: US 1999-114906P P 19990105

AB A method to **treat diseased** tissue is provided where a cytotoxic compd. is **administered** to a patient in need of **treatment** in combination with an immunostimulant. **Diseased** cells and/or infectious microbes/viruses are killed by the cytotoxic compd. in the presence of the immunostimulant. The cell components including cellular contents and cell membrane fragments are presented by the immunostimulant to the host animal as antigens to stimulate the immune responses toward other **diseased** cells of the same type(s), that either remain in the vicinity or reside in distant tissues or organs. The cytotoxic mol. and immunostimulant are preferably applied locally at high concns., either sequentially or, preferably, simultaneously. For example, the compn. can be **administered** directly to a target cancer. The compn. can be prepd. in various forms, such as a paste, a time release molded solid shape, a soln., a mixt. with emulsifier, etc. Alternatively, the cytotoxic mol. and immunostimulant are applied in sequence.

IT 53678-77-6, Muramyl dipeptide

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (pharmaceutical compns. for **treatment** of

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diseased tissues)

L18 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:104519 HCAPLUS

DOCUMENT NUMBER: 132:165114

TITLE: Compound and method for the **prevention**  
and/or the **treatment** of allergy

INVENTOR(S): Saint-Remy, Jean-Marie; Jacquemin, Marc

PATENT ASSIGNEE(S): UCB S. A., Belg.

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006694	A2	20000210	WO 1999-BE92	19990720
WO 2000006694	A3	20000316		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 976830	A1	20000202	EP 1998-870167	19980730
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
CA 2337969	AA	20000210	CA 1999-2337969	19990720
AU 9951421	A1	20000221	AU 1999-51421	19990720
BR 9912702	A	20010508	BR 1999-12702	19990720
EP 1105505	A2	20010613	EP 1999-936190	19990720
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 2002524031	T2	20020806	JP 2000-562477	19990720
PRIORITY APPLN. INFO.:			EP 1998-870167	A 19980730
			WO 1999-BE92	W 19990720

AB The present invention is related to a compd. for the **prevention** and/or the **treatment** of allergy consisting of: at least one allergen antigenic determinant which is recognized by a B cell or an antibody secreted by a B cell of a non-atopic individual to said allergen, and at least one antigenic determinant of an antigen different from said allergen which triggers T cell activation. Thus, peptides or proteins contg. T cell epitope of tetanus toxoid and/or B cell epitope of Der p II allergen, or polypeptide contg. T cell epitope of influenza A virus and B cell epitope of Der p I allergen were prepd. for **administration** by gene transfer technol. through adenoviral vehicle, or by oral through food (e.g. acidified whey milk).

IT 53678-77-6, Muramyl dipeptide

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (immune adjuvant; polypeptides or polynucleotides encoding T cell epitope and/or B cell epitope of allergen for **treating** allergy)

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L18 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:679494 HCAPLUS

DOCUMENT NUMBER: 132:164367

TITLE: Regulatory effects of cord factor (trehalose 6,6'-dimycolate) and a sulfolipid (2,3,6,6-tetraacyltrehalose 2'-sulfate) on lung granuloma formation and TNF (Tumor necrosis factor) induction in mice

AUTHOR(S): Hirai, Manabu

CORPORATE SOURCE: Department of Bacteriology, Osaka City University Medical School, Japan

SOURCE: Osaka-shi Igakkai Zasshi (1999), 48(1-2), 213-227

CODEN: OIGZDE; ISSN: 0386-4103

PUBLISHER: Osaka-shi Igakkai

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB Both cord factor (trehalose 6,6'-dimycolate) and sulfolipid (2,3,6,6'-tetraacyltrehalose 2'-sulfate) are major virulence factors of *Mycobacterium tuberculosis*. The effects of similar mycoloyl glycolipids (glucose monomycolate, fructose monomycolate, and trehalose monomycolate) from *Rhodococcus terrae* 70012 on such granuloma formation and priming tumor necrosis factor (TNF) were examd. Cord factor caused large granulomas in the lungs, spleen, and liver of ICR mice but the other glycolipids caused small ones. Sulfolipid caused little granuloma formation. Lungs form granulomas more readily than other organs, and **mycolic** acid is the key factor in granuloma formation, so I examd. the in vitro stimulation of macrophages by various mycoloyl glycolipids and sulfolipid. Resident alveolar macrophages (AM) and peritoneal macrophages induced by proteose peptone and **treated** with several glycolipids produced TNF, with the alveolar macrophages producing more. Cord factor had highest inducibility of TNF from alveolar macrophages among all glycolipids tested. The TNF inducibility of cord factor and other glycolipids from alveolar macrophages was paralleled with their granuloma forming activity in lungs in mice. There were marked differences in TNF prodn. from organ macrophages induced with glycolipids in vitro. There was a close relationship between TNF prodn. from alveolar macrophages and granuloma formation in lungs. Next, we tested on the effect of sulfolipid on the cord factor induced lung granuloma in mice. When cord factor was **administered** in combination with sulfolipid in dose responsive manner, granuloma formation was suppressed significantly. On the other hand, significant amt. of serum TNF (sTNF) was detected after elicitation with lipopolysaccharide (LPS) in cord factor-primed mice, but sulfolipid-primed mice did not show the increase in TNF level significantly. TNF levels of mice primed with cord factor and sulfolipid showed a marked decrease, according to the increase in the ratio of sulfolipid to cord factor, paralleled with granuloma suppression in lungs. Sulfolipid also inhibited the cord factor induced TNF prodn. in dose responsive manner, when AM was stimulated with cord factor and sulfolipid simultaneously. Sulfolipid may suppress cord factor-induced granuloma formation in lungs, via inhibition of cord factor-induced TNF prodn. The most characteristic pathol. change in tuberculosis is a granuloma in lungs. Granuloma formation could be a result of an accelerated

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immune inflammatory response in delayed-type hypersensitivity, to kill the intracellular tubercle bacilli and to protect the host. Therefore, such suppressive effect of sulfolipid for granuloma formation in lungs could be a new virulence site of sulfolipid.

L18 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:421786 HCAPLUS

DOCUMENT NUMBER: 131:56388

TITLE: Proteins of **Mycobacterium**

**vaccae** and the genes encoding them and their use in the diagnosis and **treatment** of **mycobacterial disease**

INVENTOR(S): Tan, Paul; Watson, James; Visser, Elizabeth S.; Skinner, Margot A.; Prestidge, Ross L.

PATENT ASSIGNEE(S): Genesis Research & Development Corporation Limited, N. Z.

SOURCE: PCT Int. Appl., 243 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9932634	A2	19990701	WO 1998-NZ189	19981223
WO 9932634	A3	19991202		
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 5968524	A	19991019	US 1997-997080	19971223
US 5985287	A	19991116	US 1997-997362	19971223
US 6160093	A	20001212	US 1998-95855	19980611
US 6406704	B1	20020618	US 1998-205426	19981204
CA 2315539	AA	19990701	CA 1998-2315539	19981223
AU 9918936	A1	19990712	AU 1999-18936	19981223
AU 746311	B2	20020418		
BR 9814432	A	20001010	BR 1998-14432	19981223
EP 1044273	A2	20001018	EP 1998-963665	19981223
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
JP 2002514385	T2	20020521	JP 2000-525553	19981223
NO 2000003261	A	20000822	NO 2000-3261	20000622
US 2002197265	A1	20021226	US 2002-51643	20020118
PRIORITY APPLN. INFO.:			US 1997-996624	A 19971223
			US 1997-997080	A 19971223
			US 1997-997362	A 19971223
			US 1998-95855	A 19980611
			US 1998-156181	A 19980917
			US 1998-205426	A 19981204
			US 1996-705347	A2 19960829
			US 1997-873970	A2 19970612

Searcher : Shears 308-4994



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WO 1998-NZ189 W 19981223

AB Antigenic and adjuvant proteins of the non-pathogenic **Mycobacterium vaccae** that may be of use in the diagnosis, **treatment**, and prophylaxis of a range of **diseases** with a **mycobacterial** etiol. are described. These proteins appear to stimulate Th1 cell function. **Diseases** that may be **treated** include infection with **Mycobacterium tuberculosis** and *M. avium*, asthma, sarcoidosis, lung cancer, and a no. of skin **diseases**. Methods for increasing the immune response to an antigen including **administration** of **M. vaccae** culture filtrate, delipidated **M. vaccae** cells, delipidated and deglycolipidated **M. vaccae** cells depleted of **mycolic** acids, and delipidated and deglycolipidated **M. vaccae** cells depleted of **mycolic** acids and **arabinogalactan** are also provided. Vaccination of mice and green monkeys with culture filtrates of **M. vaccae** was found to offer significant protection against subsequent challenge with **M. tuberculosis**. Heat-killed **M. vaccae** was also able to ameliorate the effects of psoriasis in humans with rebuilding of normal skin structure. These effects in part appear to be due to stimulation of interleukin 12 prodn. by macrophages and, to a lesser extent, interferon .gamma. prodn. by NK cells. Proteins of culture filtrates were purified by std. methods and partial amino acid sequences used to design primers for cloning of genes via PCR.

IT 9036-66-2D, **Arabinogalactan**, polymers, derivs.  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(**Mycobacterium vaccae** free of, in vaccines;  
proteins of **Mycobacterium vaccae** and genes  
encoding them and their use in diagnosis and **treatment**  
of **mycobacterial disease**)

L18 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:661494 HCAPLUS

DOCUMENT NUMBER: 129:298375

TITLE: Antimicrobial **prevention** and  
**treatment** of human immunodeficiency  
virus and other infectious **diseases**

INVENTOR(S): Squires, Meryl

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9842188	A1	19981001	WO 1998-US5792	19980324
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

Searcher : Shears 308-4994

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RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES,  
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

US 6350784	B1	20020226	US 1997-824041	19970326
AU 9867718	A1	19981020	AU 1998-67718	19980324
AU 727339	B2	20001207		
BR 9807892	A	20000222	BR 1998-7892	19980324
EP 980203	A1	20000223	EP 1998-913086	19980324
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001527541	T2	20011225	JP 1998-545926	19980324
NO 9904639	A	19991124	NO 1999-4639	19990924
MX 9908750	A	20000331	MX 1999-8750	19990924

PRIORITY APPLN. INFO.:

US 1997-824041	A	19970326
US 1996-600217	A2	19960212
US 1996-646988	A2	19960508
WO 1998-US5792	W	19980324

AB An improved medical **treatment** and medicine is provided to quickly and safely resolve HIV and other microbial infections. The inexpensive medicine can be self **administered** and maintained for the prescribed time. The attractive medicine comprises an antimicrobial conc. comprising microbe inhibitors, phytochems. or isolates. Desirably, the effective medicine comprises a surfactant and an aq. carrier or solvent and a nutrient. In the preferred form, the medicine comprises: Echinacea and Commiphora myrrha phytochems., benzalkonium chloride, a sterile water soln., and folic acid.

IT **9036-66-2, Arabinogalactan**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(antimicrobial **prevention** and **treatment** of human immunodeficiency virus and other infectious diseases)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:542524 HCAPLUS

DOCUMENT NUMBER: 129:254260

TITLE: Immunopharmacologic agents in the amelioration of hepatic injuries

AUTHOR(S): Farghali, H.; Masek, K.

CORPORATE SOURCE: Institute of Pharmacology, First Faculty of Medicine, Charles University, Prague, Czech Rep.

SOURCE: International Journal of Immunopharmacology (1998), 20(4/5), 125-139

CODEN: IJIMDS; ISSN: 0192-0561

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with many refs. A no. of immunomodulating agents of different origin have been shown to reduce liver injury of various etiologies. Immunostimulants like levamisole, **BCG**, a protein polysaccharide from myceria Coriolus versicolor PS-K, a streptococcal prepn. OK-432 and immunomodulators like N-acetylmuramyl-L-alanyl-D-isoglutamine (**MDP**) and its

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analogs. Selective T-cell suppressors like the polypeptide cyclosporine A (CsA) and the macrolide FK 506 (tacrolimus) have also been claimed to possess hepatoprotrophic or hepatoprotective properties at low doses. The aim of this review article is to highlight the interplay between the **administration** of immunomodulating agents and the amelioration of hepatic injuries. Hepatic effects of exogenous immunomodulators are discussed with special focus on the most widely used immunosuppressive agents, CsA and tacrolimus. An important question exists as to whether these potential hepatoprotective effects are related mechanistically to the immune system or are working at different levels. Due to the differences in effects and modes of actions of various immunoactive substances presented herein, a common mechanism for their cytoprotective effects cannot be formulated at this stage. Levamisole and cyanidanol may protect cells against necrosis by acting as free radical scavengers. **MDP** and its analogs reduce carbon tetrachloride-elevated (CCl<sub>4</sub>) lipid peroxides and their protective effects are primarily on hepatic cytoplasmic membranes where lipid peroxidn. and calcium homeostasis interact. **MDP** reduced CCl<sub>4</sub>-elevated calcium in both intact hepatocytes and in the post microsomal supernatant suggest that the influx of extracellular calcium across plasma membrane is affected. Elevations of intracellular calcium above a threshold are involved in: the stimulation of Ca<sup>2+</sup>-sensitive enzymes such as phospholipase A<sub>2</sub>, endonucleases and proteases, the conversion of xanthine dehydrogenase to xanthine oxidase and the formation of free radicals, all of which disturb biomembranes. **MDP** and its analogs, in a specific dose range, may act to maintain intracellular calcium within physiol. ranges. Highly complex cellular signaling systems, including calcium, are involved in the explanation of the mechanism of the immunosuppressive effect of CsA and tacrolimus. The hepatoprotective effects of these selective immunosuppressive agents, however, are independent of the inhibition of T-cell activation. The cyclophilin and tacrolimus binding proteins of the mitochondria are the receptors for these compds. and play a key role in the regulation of mitochondrial permeability transition pores. CsA or tacrolimus inhibition of mitochondrial permeability transition pores does not require interaction with calcineurin, indicating a dissocn. between immunosuppression and mitochondrial protection. The involvement of intracellular or intramitochondrial proteins in the modulation of mitochondrial permeability transition pores with the creation of a partially impermeable state for Ca<sup>2+</sup> movement in drug-treated mitochondria and the dissocn. of this effect from immunomodulatory actions potentially offers new and promising approaches for the development of new pharmacologicals targeted at **therapeutic** intervention. Clin. trials of these drugs as hepatoprotective agents are limited. Use of CsA in patients with primary biliary **cirrhosis** and autoimmune chronic **hepatitis** and in cirrhotic animal models produced by chronic **administration** of CCl<sub>4</sub> have yielded encouraging results. It seems that this class of compds. may be of substantial benefit in liver protection against many pathol. conditions where disturbance in mitochondrial function and in Ca<sup>2+</sup> homeostasis appear to be prerequisites for cell injury.

REFERENCE COUNT:

105 THERE ARE 105 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

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L18 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1998:338147 HCAPLUS  
DOCUMENT NUMBER: 129:27000  
TITLE: **Mycobacterium** cell wall compositions  
INVENTOR(S): Baxter, Alan George  
PATENT ASSIGNEE(S): Amrad Operations Pty. Ltd., Australia; Baxter,  
Alan George  
SOURCE: PCT Int. Appl., 32 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9820900	A1	19980522	WO 1997-AU770	19971113
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9749345	A1	19980603	AU 1997-49345	19971113
AU 726734	B2	20001116		
EP 948350	A1	19991013	EP 1997-911956	19971113
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			

PRIORITY APPLN. INFO.: AU 1996-3593 A 19961113  
WO 1997-AU770 W 19971113

AB The present invention relates generally to a method of immunomodulating **therapy** and pharmaceutical compns. useful for same. More particularly, the present invention provides a method of ameliorating the effects of autoimmune conditions. Even more particularly, the present invention contemplates a method for **preventing**, delaying onset of or otherwise ameliorating the effects of insulin-dependant **diabetes** mellitus (IDDM) by **administering** a cell wall subunit or a chem. or functional equiv. thereof from **Mycobacterium** or a related organism or other suitable biol. source. The present invention is further directed to a pharmaceutical compn. useful in **preventing**, delaying onset of, curing, curing in assocn. with islet replacement or otherwise ameliorating the effects of autoimmune conditions such as IDDM or for enhancing an immune response against melanoma or other cancer comprising a cell wall subunit or a chem. or functional equiv. thereof from **Mycobacterium** or a related organism or other suitable biol. source. The cell wall subunit is preferably mycolyl-**arabinogalactan-peptidoglycan** (MAPG) or a component thereof.

IT 9036-66-2D, Arabinogalactan, Mycolic acid-peptidoglycan derivs  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study);

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PROC (Process); USES (Uses)

(**Mycobacterium** cell wall compns. for **treatment**  
of **diabetes** and cancer)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L18 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:684420 HCAPLUS

DOCUMENT NUMBER: 127:345327

TITLE: Non-dendritic backbone peptide carrier

INVENTOR(S): Heegaard, Peter Mikael Helweg; Jakobsen, Palle  
Hoy

PATENT ASSIGNEE(S): Peptresearch A/S, Den.; Heegaard, Peter Mikael  
Helweg; Jakobsen, Palle Hoy

SOURCE: PCT Int. Appl., 261 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9738011	A1	19971016	WO 1997-DK146	19970403
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, SM, SN, SP, SR, ST, SV, SW, SY, SZ, TD, TH, TJ, TM, TR, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
CA 2251464	AA	19971016	CA 1997-2251464	19970403
AU 9725679	A1	19971029	AU 1997-25679	19970403
AU 704502	B2	19990422		
EP 896582	A1	19990217	EP 1997-917281	19970403
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
CN 1215404	A	19990428	CN 1997-193489	19970403
JP 2001502658	T2	20010227	JP 1997-535761	19970403
NO 9804644	A	19981203	NO 1998-4644	19981002
KR 2000005429	A	20000125	KR 1998-8186	19981002
KR 2000005429	A	20000125	KR 1998-708186	19981002
PRIORITY APPLN. INFO.:			DK 1996-398	A 19960403
			WO 1997-DK146	W 19970403

AB The present invention relates to a non-dendritic peptide designed for use as a carrier of an immunogenic substance and/or an immune mediator, a construct of said carrier carrying an immunogenic substance and/or an immune mediator, a process for the prepn. of immunogens with high and predictable immunogenicity which comprise said non-dendritic peptide carrier, use of such immunogens for the prodn. of vaccines and vaccines comprising an immunogenic substance and/or an immune mediator on the peptide carrier. The invention also relates to diagnostic or **therapeutic** embodiments using the non-dendritic peptide carrier, to diagnostic or **therapeutic** compns. and to methods for the use thereof in

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diagnosis of **diseases** and pregnancy as well as in **therapy**. The non-dendritic peptide carrier according to the invention comprises 10-50 amino acids capable of forming a secondary structure in a benign buffer after liberation from the solid phase.

IT 53678-77-6, Muramyldipeptide

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(non-dendritic backbone peptide carrier for immunogenic peptide, immune mediator or vaccine)

L18 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:365709 HCAPLUS

DOCUMENT NUMBER: 125:31931

TITLE: Use of antibodies to block the effects of gram-positive bacteria and **mycobacteria**

INVENTOR(S): Ulevitch, Richard J.; Tobias, Peter S.; Pugin, Jerome

PATENT ASSIGNEE(S): Scripps Research Institute, USA

SOURCE: PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9608272	A1	19960321	WO 1995-US11770	19950915
W:	AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT			
RW:	KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9536336	A1	19960329	AU 1995-36336	19950915
AU 703169	B2	19990318		
EP 792162	A1	19970903	EP 1995-933826	19950915
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE			
JP 10505839	T2	19980609	JP 1995-510382	19950915
US 6168790	B1	20010102	US 1998-99957	19980619
AU 9935110	A1	19990812	AU 1999-35110	19990618
AU 719499	B2	20000511		
US 2001022969	A1	20010920	US 2000-742599	20001219

PRIORITY APPLN. INFO.:

US 1994-307931	A	19940916
US 1992-990378	B2	19921215
AU 1995-36336	A3	19950915
WO 1995-US11770	W	19950915
US 1998-99957	A1	19980619

AB The present invention concerns a method of **treating** bacteremia, sepsis and other forms of toxemia caused by Gram-pos. bacterial and **mycobacteria** comprising **administering** a **therapeutically** effective amt. of anti-CD14 antibody mols. or compn. contg. anti-CD14 antibody mols. Anti-CD14 antibody inhibits the binding of Gram-pos. bacteria cell wall toxin to CD14, and the secretion of tumor necrosis factor (TNF) by monocyte macrophage lineage. The invention also comprises **administration** of anti-TNF antibody and/or antibiotic.

Searcher : Shears 308-4994

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L18 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1994:638399 HCAPLUS  
DOCUMENT NUMBER: 121:238399  
TITLE: **Treatment of mycobacterial diseases by administration of bactericidal/permeability-increasing protein products**  
INVENTOR(S): Lambert, Lewis H., Jr.  
PATENT ASSIGNEE(S): Xoma Corp., USA  
SOURCE: PCT Int. Appl., 34 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9420129	A1	19940915	WO 1994-US2463	19940311
W:	AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, UZ, VN			
RW:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
CA 2157925	AA	19940915	CA 1994-2157925	19940311
AU 9463618	A1	19940926	AU 1994-63618	19940311
EP 690721	A1	19960110	EP 1994-910876	19940311
EP 690721	B1	19980513		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE			
AT 165976	E	19980515	AT 1994-910876	19940311
ES 2119185	T3	19981001	ES 1994-910876	19940311
ZA 9401772	A	19941021	ZA 1994-1772	19940314
US 6214789	B1	20010410	US 1996-626646	19960401
US 2002103118	A1	20020801	US 2001-782642	20010213
PRIORITY APPLN. INFO.:			US 1993-31145	A 19930312
			WO 1994-US2463	W 19940311
			US 1994-285803	B1 19940804
			US 1996-626646	A1 19960401

AB The present invention relates to methods for **treating** a subject suffering from infection with **Mycobacteria**, such as *M. leprae* or *M. tuberculosis* comprising **administering** to the subject a compn. comprising a BPI protein.

L18 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1987:82412 HCAPLUS  
DOCUMENT NUMBER: 106:82412  
TITLE: Granuloma formation and hemopoiesis induced by C36-48-**mycolic** acid-containing glycolipids from *Nocardia rubra*  
AUTHOR(S): Kaneda, Kenji; Sumi, Yukie; Kurano, Fusako; Kato, Yoshiko; Yano, Ikuya  
CORPORATE SOURCE: Sch. Med., Niigata Univ., Niigata, Japan  
SOURCE: Infection and Immunity (1986), 54(3), 869-75  
CODEN: INFIBR; ISSN: 0019-9567  
DOCUMENT TYPE: Journal

Searcher : Shears 308-4994

09/308192

LANGUAGE: English

AB N. rubra Was reported to possess 3 classes of **mycolic** acid-contg. glycolipid, i.e., glucose mycolate, trehalose dimycolate, and trehalose monomycolate. The carbon chain length of their **mycolic** acids is shorter (C36-48) than that in **mycobacteria** (longer than C70), and the glycolipid consists of only .alpha.-**mycolic** acid. One i.v. administration of 500 .mu.g of each purified glycolipid to ICR mice in the form of water-in-oil-in-water emulsion without any protein antigens caused prominent granuloma formation in the lungs, spleen, and liver. The lung index in the **treated** mice was about 3.5 times larger than that in the control mice (given water-in-oil-water emulsion only) at 1 wk after the injection and then rapidly declined, whereas spleen and liver indexes peaked at 2 wk after the injection and persisted longer. The granuloma consisted of macrophages, some of which phagocytized glycolipid micelles, lymphocytes, monocytes, and neutrophils. In addn., many small hemopoietic islands were obsd. in the liver sinusoids, where various immature blood cells were trapped by the prominent cytoplasmic projections of Kupffer cells. The granuloma formation and hemopoiesis obsd. are considered to be the most characteristic morphol. expression of macrophage activation in these organs. This is the first report to show that such histol. changes can be induced by chem. defined and homogeneous **mycolic** acid-contg. glycolipids other than those of **mycobacteria**.

L18 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1986:146884 HCAPLUS

DOCUMENT NUMBER: 104:146884

TITLE: Chronic infection due to **Mycobacterium** intracellulare in mice: association with macrophage release of prostaglandin E2 and reversal by injection of indomethacin, muramyl dipeptide, or interferon-.gamma.

AUTHOR(S): Edwards, Carl K., III; Hedegaard, Holly B.; Zlotnik, Albert; Gangadharam, Pattisapu R.; Johnston, Richard B., Jr.; Pabst, Michael J.  
CORPORATE SOURCE: Sch. Med., Univ. Colorado, Denver, CO, 80206, USA

SOURCE: Journal of Immunology (1986), 136(5), 1820-7  
CODEN: JOIMA3; ISSN: 0022-1767

DOCUMENT TYPE: Journal

LANGUAGE: English

AB As a model for the study of human atypical **mycobacterial** **disease** the basis for the prolonged **mycobacteriosis** in mice infected with M. intracellulare was studied. Two weeks after i.v. injection of **mycobacteria**, peritoneal macrophages were activated, as indicated by their capacity to produce large amts. of superoxide anion in response to phorbol myristate acetate (PMA) or viable M. intracellulare. However, 4 wk after infection, despite the continued presence of large no. of **mycobacteria** in the spleen, macrophages from infected animals produced low amts. of O2-. Unfractionated spleen cells from mice infected 4 wk earlier produced increased amts. of interleukin 2 and interferon (IFN) when stimulated with the mitogen concanavalin A, but less of these lymphokines than unstimulated cells when exposed to antigens derived from M. intracellulare, suggesting prodn. of an inhibitory factor. Spleen cells from infected mice



were not stimulated to incorporate [3H]thymidine by exposure to **mycobacterial** antigens; but this unresponsiveness could be reversed by addn. of indomethacin to the cultures. The macrophages from infected animals produced large amts. of prostaglandin I<sub>2</sub> when stimulated by **mycobacterial** antigens. In vitro, such concns. of PGE<sub>2</sub> inhibited uptake of [3H]thymidine by stimulated spleen lymphocytes from infected animals. Thus, it seemed likely that in infected animals, macrophage-derived prostaglandin (PG) suppressed prodn. of IFN- $\gamma$  by lymphocytes, which in turn **prevented** activation of the macrophages to full microbicidal activity. To test this hypothesis, indomethacin, IFN- $\gamma$ , or muramyl dipeptide were **administered** to infected mice. Mice **treated** with each of these agents showed decreased spleen and lung wts., and decreased nos. of viable **mycobacteria** in these organs. These results support the concept that interaction between the host and M. intracellular is modulated profoundly by PG and suggest that **administration** of agents that directly promote macrophage activation can enhance resistance to infection by this organism.

IT 53678-77-6

RL: BIOL (Biological study)

(microbicidal action inhibition by macrophage PGE<sub>2</sub> in  
**Mycobacterium** intracellulare infection reversed by)

L18 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1974:217 HCAPLUS

DOCUMENT NUMBER: 80:217

TITLE: Suppression of growth of Ehrlich ascites tumor cells in mice pretreated with synthetic analogs of trehalose 6,6-dimycolate (cord factor)

AUTHOR(S): Yarkoni, E.; Bekierkunst, A.; Asselineau, J.;

Toubiana, R.; Toubiana, M. J.; Lederer, E.  
CORPORATE SOURCE: Hadassah Med. Sch., Hebrew Univ., Jerusalem, Israel

SOURCE: Journal of the National Cancer Institute  
(1940-1978) (1973), 51(2), 717-20  
CODEN: JNCIAM; ISSN: 0027-8874

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The i.v. **administration** of trehalose-6,6-dipalmitate [3317-99-5], trehalose monopalmitate [42939-93-5], methyl-6-mycoloyl-.alpha.-D-glucopyranose, methyl-6-mycoloyl-.beta.-D-glucopyranose, and sucrose-6,6-dimycolate induced a granulomatous response in the lungs of mice similar to that caused by living **BCG** or trehalose-6,6-dimycolate. In addn., trehalose-6,6-dipalmitate, sucrose-6,6-dimycolate, trehalose-6-monopalmitate, and cord factor (i.p.) inhibited the growth of Ehrlich ascites tumor cells subsequently injected into the peritoneal cavity of mice. Cord factor and its analogs thus simulated some of the biol. activities of living **BCG**, and the analogs could be useful in tumor suppression and cancer **therapy**. Neither the trehalose nor the **mycolic** acid moiety was essential for the activities obsd., since they could be replaced by sucrose and palmitic acid, resp.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PHIC, PHIN, TOXCENTER, CANCERLIT' ENTERED AT 09:57:10 ON 29 JAN 2003)

L19 65 S L18

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L20

45 DUP REM L19 (20 DUPLICATES REMOVED)

L20 ANSWER 1 OF 45 WPIDS (C) 2003 THOMSON DERWENT DUPLICATE 1  
ACCESSION NUMBER: 2002-590700 [63] WPIDS  
DOC. NO. CPI: C2002-167154  
TITLE: Prophylaxis or **therapy** of AIDS or AIDS  
related complex (ARC) in HIV positive subjects  
suffering from HIV infection with(out) AIDS or  
tuberculosis, by **administering** an  
immunomodulator obtained from **mycobacterium**  
w.  
DERWENT CLASS: B04 D16  
INVENTOR(S): KHAMAR, B M; MODI, I A  
PATENT ASSIGNEE(S): (KHAM-I) KHAMAR B M; (MODI-I) MODI I A  
COUNTRY COUNT: 100  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002056906	A2	20020725	(200263)*	EN	37
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC					
MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ					
DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP					
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ					
NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ					
UA UG US UZ VN YU ZA ZM ZW					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002056906	A2	WO 2002-IB97	20020117

PRIORITY APPLN. INFO: IN 2001-49 20010117

AN 2002-590700 [63] WPIDS

AB WO 200256906 A UPAB: 20021001

NOVELTY - Prophylaxis or **therapy** of acquired  
immunodeficiency syndrome (AIDS) or AIDS related complex (ARC) by  
**administering** a formulation that is prepared using  
**mycobacterium w** or an immunomodulator obtained from  
**mycobacterium w**, is new. The formulation is  
**administered** with or without adjuvants, to a subject who has  
been exposed to human immunodeficiency virus (HIV) infection or is  
HIV positive with or without overt symptoms of AIDS.

ACTIVITY - Anti-HIV.

MECHANISM OF ACTION - CD4 Agonist.

Seventeen HIV-positive individuals were **administered**  
with **mycobacterium w** (total dose of 1 multiply 108). All  
subjects were evaluated for their CD4 count at the beginning of  
**therapy** and 5 months later. The means pretreatment CD4 count  
was 204.70 (range 430-6). All subjects showed improvement in CD4  
count. At the end of 5 months mean change in CD4 count was 163.17  
(range 8-628). In seven (41.2 %) individuals increase in CDF4 count  
was more than 80 %.

USE - The method is useful for prophylaxis or **therapy**  
of AIDS or ARC in subjects who are HIV positive, even in patients

Searcher : Shears 308-4994

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who are suffering from HIV infection with or without AIDS, and with(out) tuberculosis. The method is useful for improving the CD4 + T cell count (which is obtained in the absence or presence or antiretroviral **therapy**) in patients who are suffering from HIV. It is also useful for ameliorating the symptoms associated with HIV. The method is useful for delaying the development of AIDS in patients infected with HIV, or for causing regression or even removal, of overt symptoms of AIDS even in patients where the **disease** is far advanced. (All claimed).  
Dwg.0/7

L20 ANSWER 2 OF 45 WPIDS (C) 2003 THOMSON DERWENT  
ACCESSION NUMBER: 2002-471498 [50] WPIDS  
DOC. NO. CPI: C2002-134099  
TITLE: Antibacterial compound, useful for the  
**treatment** of a bacterial infection by e.g.  
gram positive or negative bacteria, comprises a  
conjugate of glycopeptide and peptidic  
membrane-associating element.  
DERWENT CLASS: B02  
INVENTOR(S): BETLEY, J R; COOPER, M A  
PATENT ASSIGNEE(S): (ADPR-N) ADPROTECH LTD; (UYCA-N) UNIV CAMBRIDGE  
TECH SERVICES LTD  
COUNTRY COUNT: 98  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002036612	A1	20020510	(200250)*	EN	64
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2002012482	A	20020515	(200258)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002036612	A1	WO 2001-GB4867	20011102
AU 2002012482	A	AU 2002-12482	20011102

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002012482	A Based on	WO 200236612

PRIORITY APPLN. INFO: GB 2000-26924 20001103

AN 2002-471498 [50] WPIDS

AB WO 200236612 A UPAB: 20020807

NOVELTY - An antibacterial compound (I), comprises a conjugate of glycopeptide and peptidic membrane-associating element.

DETAILED DESCRIPTION - An antibacterial compound of formula V-L-W-X (I), comprises a conjugate of glycopeptide and peptidic

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membrane-associating element.

V = a glycopeptide moiety that inhibits **peptidoglycan** biosynthesis in bacteria;

L = a linking group;

W = a peptidic membrane-associating element; and

X = H or a membrane-insertive element.

INDEPENDENT CLAIMS are also included for:

(1) A method of **treating** or **preventing** a bacterial infection, comprising the **administration** of (I); and

(2) Use of (I) in the manufacture of a medicament for the **treatment** or **prevention** of a bacterial infection.

ACTIVITY - Antibacterial.

No biological data available.

MECHANISM OF ACTION - Bacterial cell wall synthesis inhibitor.

The antibacterial activity of APT2036 was determined against *E. faecium* STR 207 (a), *E. faecalis* V 583 (b), *E. faecium* STR 211 (c) and *S. aureus* H (d). The minimum inhibitory concentration (mg/ml) of APT2036 was 0.008, 0.008, 0.008 and 0.004 for (a), (b), (c) and (d) respectively. Highest concentration at which no lysis occurs was 71  $\mu$  M.

USE - (I) are used in the manufacture of a medicament for the **treatment** or prophylaxis of a bacterial infection in a human or animal body (claimed), including both the gram positive and gram negative bacteria including *Mycobacterium* sp., *Enterococcus* sp., *Escherichia* sp., *Staphylococcus* sp., *Vibrio* sp., *Neisseria* sp., *Borrelia* sp., *Klebsiella* sp., *Hemophilus* sp., *Clostridium* sp., *Pseudomonas* sp., *Actinomyces* sp., *Pneumococcus* sp. or *Salmonella* sp., particularly antibiotic resistant bacterial strains.

(I) are also useful as a wound **treatment** agent to **prevent** adhesion of bacteria to matrix proteins, especially fibronectin, exposed in wound tissue; and for prophylactic use in dental **treatment** as an alternative to, or in conjunction with, antibiotic prophylaxis.

ADVANTAGE - (I) has stronger binding to bacterial membranes which have a higher proportion of acidic phospholipids than the eukaryotic organisms, also having a higher proportion of membrane associated biosynthetic proteins.

The vancomycin shows an enhanced antimicrobial activity upon derivatization with (I) and is effective to **treat** the antibiotic resistant bacterial strains.

Dwg.0/0

L20 ANSWER 3 OF 45 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2002325943 EMBASE

TITLE: **Mycobacterium**-based vaccines for the **prevention** of allergic **disease**: A progress report.

AUTHOR: Beasley R.; Shirtcliffe P.; Harper J.L.; Holt S.; Le Gros G.

CORPORATE SOURCE: R. Beasley, Med. Res. Institute of New Zealand, PO Box 10055, Wellington, New Zealand.  
richard.beasley@mrinz.ac.nz

SOURCE: Clinical and Experimental Allergy, (2002) 32/8 (1128-1130).

Refs: 37

ISSN: 0954-7894 CODEN: CLEAEN

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COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; Editorial  
FILE SEGMENT: 007 Pediatrics and Pediatric Surgery  
015 Chest Diseases, Thoracic Surgery and  
Tuberculosis  
026 Immunology, Serology and Transplantation  
037 Drug Literature Index  
038 Adverse Reactions Titles  
LANGUAGE: English

L20 ANSWER 4 OF 45 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.  
ACCESSION NUMBER: 2002297852 EMBASE  
TITLE: Current status and future development of  
antitubercular chemotherapy.  
AUTHOR: Kremer L.; Besra G.S.  
CORPORATE SOURCE: G.S. Besra, School of Biosciences, University of  
Birmingham, Edgbaston, Birmingham B15 2TT, United  
Kingdom. g.besra@bham.ac.uk  
SOURCE: Expert Opinion on Investigational Drugs, (2002) 11/8  
(1033-1049).  
Refs: 136  
ISSN: 1354-3784 CODEN: EOIDER

COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; General Review  
FILE SEGMENT: 004 Microbiology  
015 Chest Diseases, Thoracic Surgery and  
Tuberculosis  
030 Pharmacology  
036 Health Policy, Economics and Management  
037 Drug Literature Index  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB Tuberculosis (TB), which kills more people than any other infectious  
**disease**, was declared a global emergency by the World Health  
Organization in 1993. The emergence of new **Mycobacterium**  
**tuberculosis** strains that are resistant to some or all  
current antitubercular drugs seriously hampers the control of the  
**disease**. Up to 50 million people may be infected with  
drug-resistant TB, with resistance being caused by inconsistent or  
partial **treatment** when patients do not comply with  
long-term chemotherapy. Resistance is often a corollary to HIV  
infection. Besides being more fatal, drug-resistant TB is more  
difficult and more expensive to **treat**. In addition to this  
human cost, TB also represents a significant economic burden for  
developing countries. Therefore, new approaches to the  
**treatment** of TB are needed. During the last few years,  
important efforts have been made in order to elucidate the molecular  
mechanism of action of antitubercular drugs and understand the  
genetic basis of acquired drug resistance in **M.**  
**tuberculosis**. The identification of novel targets requires  
the characterisation of biochemical pathways specific to  
**mycobacteria**. Many unique metabolic processes occur during  
the biosynthesis of cell wall components, including  
**arabinogalactan** and **mycolic** acids. In this review,  
the mode of action of first- and second-line agents, as well as the  
potentiality of some promising drugs that are still at an early  
stage of development will be described. Finally, some of the  
attractive targets offered by the **mycobacterial** cell wall

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for the rational design of new antitubercular drugs for a future and more effective control of the **disease** will be examined.

L20 ANSWER 5 OF 45 MEDLINE DUPLICATE 2  
ACCESSION NUMBER: 2002128104 MEDLINE  
DOCUMENT NUMBER: 21852048 PubMed ID: 11863264  
TITLE: Pulmonary granulomas of guinea pigs induced by inhalation exposure of heat-**treated** BCG Pasteur, purified trehalose dimycolate and methyl ketomycolate.  
AUTHOR: Sugawara I; Udagawa T; Hua S C; Reza-Gholizadeh M; Otomo K; Saito Y; Yamada H  
CORPORATE SOURCE: Department of Molecular Pathology, Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Kiyose, Tokyo.. sugawara@jata.or.jp  
SOURCE: JOURNAL OF MEDICAL MICROBIOLOGY, (2002 Feb) 51 (2) 131-7.  
Journal code: 0224131. ISSN: 0022-2615.  
PUB. COUNTRY: England: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200203  
ENTRY DATE: Entered STN: 20020227  
Last Updated on STN: 20020308  
Entered Medline: 20020307

AB This study was designed to determine the identity of granulomatogenic substances in **Mycobacterium bovis** BCG Pasteur. When heat-**treated** BCG Pasteur bacilli were introduced into the lungs of guinea-pigs by an inhalation exposure apparatus, pulmonary granulomas without necrosis developed. Furthermore, when four kinds of mycolates derived from **M. tuberculosis** Aoyama B strain were introduced into the lungs by the same method, only trehalose 6,6'-dimycolate (TDM) and methyl ketomycolate induced pulmonary granulomas without central necrosis. The pulmonary granulomas consisted of epithelioid macrophages and lymphocytes. When a mixture of TDM and anti-TDM antibody was introduced into the lungs, development of granulomatous lesions was reduced. These data indicate that TDM and methyl ketomycolate are potent granulomatogenic reagents.

L20 ANSWER 6 OF 45 WPIDS (C) 2003 THOMSON DERWENT  
ACCESSION NUMBER: 2001-483502 [52] WPIDS  
DOC. NO. NON-CPI: N2001-357874  
DOC. NO. CPI: C2001-145049  
TITLE: Predicting propensity of development of or the efficacy of **treatment** for, or diagnosing an autoimmune **disorder**, comprises measuring level or activity of T cells.  
DERWENT CLASS: B04 D16 S03  
INVENTOR(S): KUKREJA, A; MACLAREN, N K; MACLAREN, N  
PATENT ASSIGNEE(S): (BIOS-N) BIOSEEK; (KUKR-I) KUKREJA A; (MACL-I) MACLAREN N K  
COUNTRY COUNT: 94  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
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Searcher : Shears 308-4994

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WO 2001057534 A2 20010809 (200152)\* EN 43  
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC  
MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW  
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE  
DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG  
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU  
ZA ZW  
AU 2001034784 A 20010814 (200173)  
US 2002031787 A1 20020314 (200222)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001057534	A2	WO 2001-US3522	20010202
AU 2001034784	A	AU 2001-34784	20010202
US 2002031787	A1 Provisional	US 2000-180305P	20000204
		US 2001-775687	20010202

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001034784	A Based on	WO 200157534

PRIORITY APPLN. INFO: US 2000-180305P 20000204; US 2001-775687  
20010202

AN 2001-483502 [52] WPIDS  
AB WO 200157534 A UPAB: 20010914  
NOVELTY - Predicting (M1) propensity of development of an autoimmune **disorder**, diagnosing (M2) an autoimmune **disorder**, or predicting (M3) the efficacy of **treatment** for an autoimmune **disorder**, comprising measuring the number or level of indicator T cells, or the activity of indicator cells, is new

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) **preventing** (M4) development or ameliorating (M5) the symptoms of an autoimmune **disorder**, comprising **administering** an enhancing agent; and

(2) a kit for predicting the propensity of a subject to develop an autoimmune **disorder** or the effectiveness of a **treatment** for an autoimmune **disorder**, comprising a detection reagent which is at least one antibody which recognizes a cell surface marker on an indicator cell or a probe that recognizes a nucleic acid (NA) in an indicator cell.

ACTIVITY - Antiallergic; antiinflammatory; immunosuppressive; antiasthmatic.

MECHANISM OF ACTION - Vaccine.

Stimulation of NK-T cells.

USE - The method is used to predict propensity of development of an autoimmune **disorder**, diagnose an autoimmune **disorder**, or predict the efficacy of **treatment** for an autoimmune **disorder**, where the autoimmune **disorder** is hay fever, allergic rhinitis, or asthma (all claimed).

Dwg.0/10

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L20 ANSWER 7 OF 45 MEDLINE  
ACCESSION NUMBER: 2001686414 MEDLINE  
DOCUMENT NUMBER: 21589255 PubMed ID: 11732641  
TITLE: An approach for the rational design of new  
antituberculosis agents.  
AUTHOR: Pasqualoto K F; Ferreira E I  
CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, University of Sao  
Paulo, SP, Brazil.. kerly@netpoint.com.br  
SOURCE: Curr Drug Targets, (2001 Dec) 2 (4) 427-37. Ref: 43  
Journal code: 100960531. ISSN: 1389-4501.  
PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, TUTORIAL)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200205  
ENTRY DATE: Entered STN: 20011205  
Last Updated on STN: 20020528  
Entered Medline: 20020524

AB Tuberculosis (TB) kills more youth and adults than any other  
infectious **disease** in the world today. The emergence of  
new strains of **Mycobacterium tuberculosis**  
resistant to some or all current antituberculosis drugs is a serious  
and crescent problem. The resistance is often a corollary to HIV  
infection and drug-resistant TB is more difficult and more expensive  
to **treat**, besides to be more likely fatal. Thus, it is  
still necessary to search for new antimycobacterial agents. The  
identification of novel targets need the identification of  
biochemical pathways specific to **mycobacteria** and related  
organisms. Many unique metabolic processes occur during the  
biosynthesis of **mycobacterial** cell wall components. In  
this report, we examine one of these attractive targets for the  
rational design of new antituberculosis agents--the **mycolic**  
acids.

L20 ANSWER 8 OF 45 WPIDS (C) 2003 THOMSON DERWENT  
ACCESSION NUMBER: 2001-041266 [05] WPIDS  
DOC. NO. CPI: C2001-012031  
TITLE: New compositions, useful for **treating**  
e.g. respiratory and allergic **disorders**,  
atherosclerosis, cancer, bacterial infections and  
**diabetes**, comprising delipidated and  
deglycolipidated **mycobacterial** cells.  
DERWENT CLASS: B04 D16  
INVENTOR(S): PRESTIDGE, R L; TAN, P L J; WATSON, J D; PRESTIDGE,  
R  
PATENT ASSIGNEE(S): (GENE-N) GENESIS RES & DEV CORP LTD; (GENE-N)  
GENESIS RES & DEV CO LTD  
COUNTRY COUNT: 94  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
-----					
WO 2000074715	A1	20001214	(200105)*	EN	63
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC					
MW MZ NL OA PT SD SE SL SZ TZ UG ZW					

Searcher : Shears 308-4994



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W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL  
PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU  
ZA ZW

AU 2000052579 A 20001228 (200119)  
US 6350457 B1 20020226 (200220)  
EP 1181051 A1 20020227 (200222) EN  
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK  
NL PT RO SI  
BR 2000011239 A 20020402 (200231)  
KR 2002021375 A 20020320 (200264)  
CN 1371285 A 20020925 (200305)  
JP 2003501400 W 20030114 (200306) 72

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000074715	A1	WO 2000-NZ85	20000601
AU 2000052579	A	AU 2000-52579	20000601
US 6350457	B1 Provisional	US 1999-137112P	19990602
		US 1999-449013	19991124
EP 1181051	A1	EP 2000-937399	20000601
		WO 2000-NZ85	20000601
BR 2000011239	A	BR 2000-11239	20000601
		WO 2000-NZ85	20000601
KR 2002021375	A	KR 2001-714951	20011123
CN 1371285	A	CN 2000-808400	20000601
JP 2003501400	W	WO 2000-NZ85	20000601
		JP 2001-501249	20000601

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000052579	A Based on	WO 200074715
EP 1181051	A1 Based on	WO 200074715
BR 2000011239	A Based on	WO 200074715
JP 2003501400	W Based on	WO 200074715

PRIORITY APPLN. INFO: US 1999-449013 19991124; US 1999-137112P  
19990602

AN 2001-041266 [05] WPIDS

AB WO 200074715 A UPAB: 20021105

NOVELTY - A composition (I) comprising delipidated and  
deglycolipidated (DD) **Mycobacterium** (MB) cells  
treated by:

- (a) alkaline hydrolysis;
- (b) acid hydrolysis;
- (c) periodic acid;
- (d) alkaline and acid hydrolysis;
- (e) alkaline hydrolysis and periodic acid;
- (f) Proteinase K; and
- (g) hydrofluoric acid hydrolysis, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included  
for a composition (II) comprising DD **Mycobacterium**  
**vaccae** cells treated by:

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- (a) alkaline hydrolysis;
- (b) acid hydrolysis;
- (c) periodic acid;
- (d) alkaline and acid hydrolysis;
- (e) alkaline hydrolysis and periodic acid;
- (f) Proteinase K; and
- (g) hydrofluoric acid hydrolysis.

ACTIVITY - Antibacterial; Antiasthma; Antiallergic; Antiinflammatory; Dermatological; Antiarteriosclerotic; Cytostatic; Antilipemic; Antidiabetic. The ability of DD **Mycobacterium vaccae** (MV) cells and derivatives of DD-MV to inhibit the development of allergic responses was examined in a mouse model of the asthma-like allergen specific lung **disease**. BALB/cByJ mice were given 2 micro g ovalbumin (OVA) in 2 mg alum adjuvant by the intraperitoneal route at 0 and 14 days, and subsequently given 100 micro g OVA in 50 micro l phosphate buffered saline (PBS) by the intranasal route on day 28. The mice accumulated eosinophils in their airways as detected by washing the airways of the anesthetized mice with saline, collecting the washing (bronchiolar lavage (BAL)), and counting the numbers of eosinophils. DD-MV compositions were **administered** intranasally one week before intranasal challenge with OVA. Statistically significant reductions were observed in the percentage of eosinophils in BAL cells collected 6 days after challenge with OVA, compared to control mice. **Administration** of DD-MV or derivatives may therefore reduce the severity of asthma and **diseases** that involve similar immune abnormalities, such as allergic rhinitis, atopic dermatitis and eczema.

MECHANISM OF ACTION - Immune system modulators.

USE - (I) and (II) (composition comprising **treated** DD **Mycobacterium vaccae** cells) are useful for **treating disorders** of the respiratory system and allergic **disorders** e.g. **mycobacterial** infections, sarcoidosis, allergic rhinitis, atopic dermatitis, lung cancers and especially asthma. Particularly preferred are respiratory **disorders** characterized by eosinophilia in respiratory system tissues. They can also be used to **treat** atherosclerosis, cancer, hypercholesterolemia, bacterial infections, and insulin-dependent **diabetes** mellitus. The compositions can be **administered** for reducing eosinophilia in a patient and for enhancing IL-10 production. Compositions comprising heat killed **Mycobacterium vaccae** cells or (II) can be used for activating gamma delta T cells, alpha beta T cells or NK cells or repairing epithelium in a patient. (claimed).  
Dwg.0/16

L20 ANSWER 9 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
ACCESSION NUMBER: 2002:142261 BIOSIS  
DOCUMENT NUMBER: PREV200200142261  
TITLE: A monoclonal antibody promotes the clearance of a **Mycobacterium tuberculosis** lipopolysaccharide that is implicated in virulence.  
AUTHOR(S): Glatman-Freedman, A. (1); Mednick, A. J.; Lendvai, N.; Casadevall, A.  
CORPORATE SOURCE: (1) Department of Pediatrics, Children's Hospital at Montefiore, Albert Einstein College of Medicine, Bronx, NY USA  
SOURCE: Journal of Investigative Medicine, (March, 2000) Vol.

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48, No. 2, pp. 221A. <http://www.jinvmed.com/>. print.  
Meeting Info.: Eastern Society for Pediatric Research  
ISSN: 1081-5589.

DOCUMENT TYPE: Conference  
LANGUAGE: English

L20 ANSWER 10 OF 45 WPIDS (C) 2003 THOMSON DERWENT DUPLICATE 3  
ACCESSION NUMBER: 1999-430163 [36] WPIDS  
CROSS REFERENCE: 1998-216926 [19]; 2002-138361 [18]  
DOC. NO. NON-CPI: N1999-320261  
DOC. NO. CPI: C1999-126734  
TITLE: Enhancing immune response to an antigen.  
DERWENT CLASS: B04 D16 S03  
INVENTOR(S): PRESTIDGE, R L; SKINNER, M A; TAN, P; VISSER, E S;  
WATSON, J; TAN, P L J; WATSON, J D; PRESTIDGE, R;  
SKINNER, M; VISSER, E  
PATENT ASSIGNEE(S): (GENE-N) GENESIS RES & DEV CORP LTD; (TANP-I) TAN P  
L J; (WATS-I) WATSON J D; (GENE-N) GENESIS RES &  
DEV CORP  
COUNTRY COUNT: 85  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9932634	A2	19990701	(199936)*	EN	243
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
AU 9918936	A	19990712	(199950)		
US 5968524	A	19991019	(199950)		
US 5985287	A	19991116	(200001)		
EP 1044273	A2	20001018	(200053)	EN	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
NO 2000003261	A	20000822	(200054)		
BR 9814432	A	20001010	(200055)		
US 6160093	A	20001212	(200067)		
CZ 2000002321	A3	20010214	(200119)		
HU 2001000352	A2	20010628	(200143)		
CN 1294632	A	20010509	(200146)		
KR 2001033132	A	20010425	(200164)		
JP 2002514385	W	20020521	(200236)		268
AU 746311	B	20020418	(200238)		
US 6406704	B1	20020618	(200244)		
US 2002197265	A1	20021226	(200304)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9932634	A2	WO 1998-NZ189	19981223
AU 9918936	A	AU 1999-18936	19981223
US 5968524	A	US 1997-997080	19971223
US 5985287	A	CIP of US 1996-705347	19960829
		CIP of US 1997-873970	19970612
		US 1997-997362	19971223

Searcher : Shears 308-4994

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EP 1044273	A2		EP 1998-963665	19981223
NO 2000003261	A		WO 1998-NZ189	19981223
BR 9814432	A		WO 1998-NZ189	19981223
US 6160093	A	CIP of	NO 2000-3261	20000622
		CIP of	BR 1998-14432	19981223
		CIP of	WO 1998-NZ189	19981223
CZ 2000002321	A3		US 1996-705347	19960829
HU 2001000352	A2		US 1997-873970	19970612
CN 1294632	A		US 1997-997362	19971223
KR 2001033132	A		US 1998-95855	19980611
JP 2002514385	W		WO 1998-NZ189	19981223
			CZ 2000-2321	19981223
AU 746311	B		WO 1998-NZ189	19981223
US 6406704	B1	CIP of	HU 2001-352	19981223
		CIP of	CN 1998-813781	19981223
		CIP of	KR 2000-706505	20000615
		CIP of	WO 1998-NZ189	19981223
US 2002197265	A1	CIP of	JP 2000-525553	19981223
		Cont of	AU 1999-18936	19981223
			US 1996-705347	19960829
			US 1997-873970	19970612
			US 1997-997362	19971223
			US 1998-95855	19980611
			US 1998-205426	19981204
			US 1997-996624	19971223
			US 1998-156181	19980917
			US 2002-51643	20020118

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9918936	A	Based on	WO 9932634
EP 1044273	A2	Based on	WO 9932634
BR 9814432	A	Based on	WO 9932634
US 6160093	A	CIP of	US 5985287
		CIP of	US 6001361
CZ 2000002321	A3	Based on	WO 9932634
HU 2001000352	A2	Based on	WO 9932634
JP 2002514385	W	Based on	WO 9932634
AU 746311	B	Previous Publ.	AU 9918936
		Based on	WO 9932634
US 6406704	B1	CIP of	US 5985287
		CIP of	US 6001361

PRIORITY APPLN. INFO: US 1998-205426 19981204; US 1997-996624  
 19971223; US 1997-997080 19971223; US  
 1997-997362 19971223; US 1998-95855  
 19980611; US 1998-156181 19980917; US  
 1996-705347 19960829; US 1997-873970  
 19970612; US 2002-51643 20020118

AN 1999-430163 [36] WPIDS  
 CR 1998-216926 [19]; 2002-138361 [18]  
 AB WO 9932634 A UPAB: 20030117  
 NOVELTY - Heat-killed **Mycobacterium vaccae**, or  
 recombinant **M. vaccae** proteins, may be employed  
 to activate T cells and natural killer (NK) cells, to stimulate the  
 production of cytokines, to enhance the expression of co-stimulatory

molecules on dendritic cells and monocytes, and to enhance dendritic cell maturation and function.

**DETAILED DESCRIPTION** - A polypeptide (I) comprising an immunogenic portion of an isolated *M. vaccae* antigen is new, and is selected from the 91, 136, 228, 231, 748, 221, 161, 541, 327, 134, 108, 348, 471, 722, 297, 670, 152, 331, 69, 268, 41, 111, 370, 159, 285, 243, 223, 187, 340 or 173 amino acid sequence given in the specification. Alternatively, (I) is at least 50%, 75% or 95% identical to one of these sequences, as measured by computer algorithm BLASTP. (I) is encoded by a polynucleotide (II), selected from the 273, 554, 808, 683, 1125, 666, 480, 1626, 985, 403, 336, 1111, 1420, 2172, 898, 2013, 520, 1071, 207, 898, 337, 1164, 650, 743 or 858 base pair sequence given in the specification. Alternatively, (II) is the complement of one of these sequences, or has a 99% probability of being the same sequence as measured by computer algorithm BLASTN.

**INDEPENDENT CLAIMS** are also included for the following:

- (1) an expression vector comprising (II);
- (2) a host cell, preferably *E. coli*, *mycobacteria*, insect, yeast or mammalian cells, transformed with the vector of (1);
- (3) a fusion protein comprising (I);
- (4) a pharmaceutical composition comprising (I) or (II) or the fusion protein of (3) and a physiologically acceptable carrier;
- (5) a vaccine comprising (I) or (II) or the fusion protein of (3) and a non-specific immune response amplifier;
- (6) a method for enhancing an immune response in a patient, comprising **administering** the pharmaceutical composition of (4) or the vaccine of (5);
- (7) a method for the **treatment** of a **disorder** in a patient, comprising **administering** the pharmaceutical composition of (4) or the vaccine of (5);
- (8) a method for the **treatment** of a **disorder** in a patient, comprising **administering** a composition comprising a component selected from:
  - (a) inactivated *M. vaccae* cells;
  - (b) delipidated and deglycolipidated *M. vaccae* cells depleted of **mycolic** acids;
  - (c) delipidated and deglycolipidated *M. vaccae* cells depleted of **mycolic** acid and **arabinogalactan**; and *M. vaccae* culture filtrate;
- (9) a method for enhancing a non-specific immune response to an antigen, comprising **administering** a polypeptide comprising an immunogenic portion of a *M. vaccae* antigen selected from:
  - (a) the 376 or 223 amino acid sequence given in the specification; or
  - (b) sequences at least 80% identical to these, as measured by computer algorithm BLASTP;
- (10) a method for detecting **mycobacterial** infection in a patient, comprising contacting the dermal cells of the patient with (I) and detecting an immune response, e.g. induration, on the patients skin;
- (11) a diagnostic kit comprising (I) and apparatus sufficient to contact the polypeptide with the dermal cells of a patient;
- (12) a method for detecting **mycobacterial** infection in a biological sample, comprising contacting the sample with (I)

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and detecting the presence of antibodies that bind to the polypeptide. The polypeptides are optionally bound to a solid support;

(13) a method for detecting **mycobacterial** infection in a biological sample, comprising contacting the sample with a binding agent, e.g. a mono- or a polyclonal antibody, which is capable of binding to (I) and detecting this binding;

(14) a diagnostic kit comprising (I) (preferably immobilized on a solid support) and a detection reagent, e.g. a reporter group (which is especially a radioisotope, a fluorescent group, a luminescent group, an enzyme, biotin or dye particles) conjugated to a binding agent (which is especially an anti-immunoglobulin, Protein G, Protein A or lectin);

(15) a mono- or polyclonal antibody that binds to (I); and

(16) a method for enhancing a non-specific immune response to an antigen, comprising **administering** a composition comprising a component selected from:

(a) delipidated and deglycolipidated **M. vaccae** cells depleted of **mycolic** acids;

(b) delipidated and deglycolipidated **M. vaccae** cells depleted of **mycolic** acid and **arabinogalactan**.

ACTIVITY - Antiasthmatic; Antiinflammatory; Antipsoriatic; Cytostatic; Dermatological; Tuberculostatic.

MECHANISM OF ACTION - Vaccine.

USE - The compositions can be used for the treatment, prevention, and detection of disorders including infectious diseases (claimed), immune disorders (claimed) and cancer. In particular, the compounds and methods are used for treatment of diseases of the respiratory system (claimed), such as mycobacterial infections (claimed), asthma (claimed), allergies, tuberculosis, leprosy, sarcoidosis and lung cancers, and disorders of the skin (claimed) such as psoriasis (claimed), atopic dermatitis, eczema, allergic contact dermatitis, alopecia areata, and skin cancers such as basal carcinoma, squamous cell carcinoma and melanoma.

The products can also be used as vaccines or in immunotherapy.

ADVANTAGE - Of all the available therapies for treating cutaneous lesions, only interferon possesses a specific antiviral mode of action, by reproducing the body's immune response to infection. However, Interferon treatment cannot eradicate viruses. Interferon treatment is also associated with systemic adverse effects, and requires multiple injections, at a significant economic cost. Use of **M. vaccae** to immunize individuals overcomes these problems.

Dwg.0/13

L20 ANSWER 11 OF 45 WPIDS (C) 2003 THOMSON DERWENT  
ACCESSION NUMBER: 1999-620288 [53] WPIDS  
DOC. NO. CPI: C1999-181049  
TITLE: Enhancing mammalian immune response, useful for  
**treating** individuals suffering from an  
immuno-compromised **disease** or  
**disorder** e.g. AIDS and/or for use with  
chemotherapy recipients.  
DERWENT CLASS: B04 D16  
INVENTOR(S): BRENNER, M B; DASCHER, C C; HIROMATSU, K; PORCELLI,  
S A  
PATENT ASSIGNEE(S): (BGHM) BRIGHAM & WOMENS HOSPITAL INC; (BGHM)

Searcher : Shears 308-4994

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lung granuloma in both C57Bl/6 mice, high responders to **BCG** cell walls (CW), and C3H/He mice, low responders, 1 week after the injection, and when challenged at this time by aerosol containing virulent bovine tubercle bacilli, they showed significantly increased resistance. The present results confirmed the close relationship between lung granuloma and protection against aerosol challenge with Ravenel and revealed that the extent of lung granuloma at the time of aerosol challenge is crucial for the development of protection in mice immunized with mycol-**MDP** plus PPD as it is in mice immunized with **BCG** CW. However, these findings are not always the case for lung granuloma induced with mycol-**MDP** alone.

L20 ANSWER 42 OF 45 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 81009254 EMBASE

DOCUMENT NUMBER: 1981009254

TITLE: Cancer immunotherapy with **BCG** and its derivatives. Clinical trials.

AUTHOR: Ogura T.

CORPORATE SOURCE: III Dept. Int. Med., Osaka Univ. Med. Sch., Fukushima-ku, Osaka, Japan

SOURCE: Kekkaku, (1980) 55/8 (359-363).

CODEN: KEKKAG

COUNTRY: Japan

DOCUMENT TYPE: Journal

FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis  
006 Internal Medicine  
051 Leprosy and other Mycobacterial Diseases  
037 Drug Literature Index  
026 Immunology, Serology and Transplantation

LANGUAGE: Japanese

SUMMARY LANGUAGE: English

AB Immunotherapy has been evaluated as a significant adjuvant **therapy** in addition to the conventional **therapies** such as surgery, radiotherapy and chemotherapy. In particular, living **BCG** is still most widely employed for various kinds of malignant **diseases** with apparent clinical effect on prolonging survival period and **disease**-free intervals of the patients. In general these effects are apparent when **BCG** is **administered** intratumorally. However, serious side effects including hepatic granuloma were also reported by many investigators. Moreover, the activity of living **BCG** differs according to strain, and some problems due to living bacteria remain unsolved. In order to establish the immunotherapy with nonviable bacterial adjuvant, some efforts have been continued. Methanol extraction residue (MER) has the advantages of nonviability and precise dose. However, it is a partial purification product and still contains protein component. Previous experiments have shown that cell-wall skeleton (CWS), having a principal structure of **mycolic acid-arabinogalactan-mucopeptide** complex, is a biologically active component in immunopotentiality. Further studies with **BCG**-CWS revealed a potent immunotherapeutic activity for human tumors as well as syngeneic tumors in mice and rats. In clinical trials for large numbers of cancer patients, no serious side effects were experienced. Thus, it can be concluded that adjuvant immunotherapy with **BCG**-CWS is a useful **therapeutic** modality for cancer patients.

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L20 ANSWER 43 OF 45      CANCERLIT  
ACCESSION NUMBER:    79805794      CANCERLIT  
DOCUMENT NUMBER:    79805794  
TITLE:                ENHANCEMENT OF ENDOTOXIC SHOCK BY  
                      N-ACETYLMURAMYL-L-ALANYL-(L-SERYL)-D-ISOGLUTAMINE  
                      (MURAMYL DIPEPTIDE).  
AUTHOR:              Ribi E E; Cantrell J L; Von Eschen K B; Schwartzman S  
                      M  
CORPORATE SOURCE:    Rocky Mountain Labs., Lab. Microbial Structure and  
                      Function, Natl. Inst. Allergy and Infectious  
                      Diseases, NIH, Hamilton, MT, 59840.  
SOURCE:              Cancer Res, (1979) 39 (11) 4756-4759.  
                      ISSN: 0008-5472.  
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE:            English  
FILE SEGMENT:        Hierarchical Classification of Proteins  
ENTRY MONTH:         197912  
ENTRY DATE:          Entered STN: 19941107  
                      Last Updated on STN: 19941107

AB    The enhancement of endotoxic shock by muramyl dipeptide (**MDP**) in guinea pigs bearing established line 10 dermal tumors is reported. Injection of tumors with endotoxic glycolipids from Re mutant gram-negative bacteria (ReGI: 150 ug) alone or in combination with trehalose dimycolate (THD: 150 ug) or **BCG** cell wall skeleton (CWS: 150 ug) did not result in any early deaths among **treated** animals. Combination **treatment** was more effective in regressing tumors than were any of the compounds alone. A chromatographic fraction of ReGI (B4: 150 ug), which was deficient in peptidic contaminants, was ineffective in regressing tumors when combined with THD. However, when B4 was combined with mucopeptide-containing CWS, 100% of the animals were cured. None of these animals became lethargic or died of shock. When CWS was replaced by an equal quantity of **MDP** plus B4, 18% of the animals died within a few hours after **treatment**, presumably of endotoxic shock. Surviving animals were lethargic for about 24 hr after **treatment**. Primary tumors of nearly all surviving animals **treated** with id **MDP** plus B4 regressed; however, only animals that received **MDP**, B4, and THD (91% cures) were also cured of metastatic **disease** and resisted contralateral challenge. When **administered** alone, none of the compounds caused severe lethargy or lethality. The lethal effects of **MDP** also occurred in combination with relatively weak endotoxic products such as *Pseudomonas aeruginosa* vaccine (Pseudogen), and these effects did not depend on the presence of malignant tissue. Guinea pigs inoculated iv were even more susceptible to this toxicity; as little as 6 ug of **MDP** added to 150 ug of Pseudogen (itself not lethal) caused death of 4/5 animals. (15 Refs)

L20 ANSWER 44 OF 45    EMBASE    COPYRIGHT 2003 ELSEVIER SCI. B.V.  
ACCESSION NUMBER:    79088516    EMBASE  
DOCUMENT NUMBER:    1979088516  
TITLE:                II. **Mycobacteria** and cellular immunity.  
AUTHOR:              Yamamura Y.  
CORPORATE SOURCE:    Osaka Univ. Med. Sch., Fukushima-ku, Osaka, Japan  
SOURCE:              Kekkaku, (1978) 53/11 (551-554).  
                      CODEN: KKKAG

Searcher :            Shears            308-4994



09/308192

COUNTRY: Japan  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and  
Tuberculosis  
051 Leprosy and other Mycobacterial Diseases  
016 Cancer  
004 Microbiology  
026 Immunology, Serology and Transplantation  
LANGUAGE: Japanese  
SUMMARY LANGUAGE: English

AB It has been shown that **mycobacterial** cells including tubercle bacilli are very useful for the study on cellular immunology. The results of our immunological study on tubercle bacilli are: Experimental cavity formation in rabbits. We have clearly shown that experimental tuberculous cavity was produced by the intrathoratic injection of heat-killed **mycobacterial** cells suspended in mineral oil. Recently it was also shown that the intrathoratic injection of **mycobacterial** protein antigen together with potent adjuvant substance such as **BCG** cell-wall skeleton emulsified in Freund's incomplete adjuvant produced experimental cavity in rabbits. Tuberculin active peptide (TAP). TAP purified from the defatted cells of **mycobacteria** and nocardia was shown to be low molecular weight (< 10,000 dalton) and stable. The specificity of TAP in skin-reaction is almost similar with that of PPDs. Cancer immunotherapy with **BCG** cell-wall skeleton (CWS). **BCG**-CWS was shown to have principal chemical structure of '**mycolic** acid-arabinogalactanmucopeptide' complex, and the adjuvant activity of **BCG**-CWS was examined in detail. We have also shown that oil-attached **BCG**-CWS had potent anti-tumor activity in transplantable tumors in syngeneic mice, rats and guinea pigs. **BCG**-CWS stimulated the depressed T cell function to normal level in tumor-bearing host. The incidence of carcinogenicity with chemical carcinogens in mice, rats and rabbits was inhibited by the **administration** of **BCG**-CWS. **BCG**-CWS is now being used as immunotherapeutic agent for the **treatment** of human malignant **diseases** especially in the patients with lung cancer and leukemia. Synthetic **peptidoglycan** subunits. The minimum adjuvant-active subunit of bacterial cell-wall was established to be N-acetyl-muramyl-L-alanyl-D-isoglutamine (MDP). **MDP** was shown to have adjuvant activity, but no antitumor activity. 6-O-Mycoloyl-MDP showed potent adjuvant activity on cellular immune response and antitumor activity in transplantable tumor in syngeneic mice. It was also found that the immunization with DNP-6-O-Mycoloyl-MDP induced the IgE specific suppressor cells which did not affect the production of IgG class antibody to DNP.

L20 ANSWER 45 OF 45 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE  
15

ACCESSION NUMBER: 79061741 EMBASE  
DOCUMENT NUMBER: 1979061741  
TITLE: Immunotherapy with **BCG** or its derivatives  
in acute myelogenous leukemia.  
AUTHOR: Kishimoto S.; Araki K.; Saito T.  
CORPORATE SOURCE: II Dept. Int. Med., Kumamoto Univ. Med. Sch.,  
Kumamoto, Japan  
SOURCE: Gann Monographs on Cancer Research, (1978) VOL. 21/-

Searcher : Shears 308-4994

09/308192

(189-198).  
CODEN: GANMAX  
COUNTRY: Japan  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 037 Drug Literature Index  
016 Cancer  
025 Hematology  
026 Immunology, Serology and Transplantation  
004 Microbiology  
LANGUAGE: English  
AB Current immunotherapy in acute myelogenous leukemia (AML) by the use of live **BCG** or its derivatives is reviewed. Immunotherapy usually consisted of **administration** of live **BCG** by scarification or multiple-puncture with or without autologous or allogeneic myeloblasts between courses of the maintenance chemotherapy after having achieved full remission. The efficacy of live **BCG** generally depended on the strain, viability, absence of free antigen, dose, route, and schedule of **administration**. Immunotherapy with live **BCG** alone or in combination with maintenance chemotherapy was usually effective in prolonging the median duration of remission and survival. A methanol extraction residue prepared from **BCG** was also effective when given alone or combined with allogeneic, irradiated, neuraminidase-**treated** myeloblasts. Cell-wall skeleton (CWS) identified as a '**mycolic acid-arabinogalactan-mucopeptide**' complex caused a significant prolongation of median survival compared with that of historical control patients, when AML patients in remission were kept on CWS intradermal injections combined with maintenance chemotherapy. Many immunological parameters, including delayed-type hypersensitivity to recall antigens, T cell counts, phytohemagglutinin responsiveness, blastogenic response, and cell-mediated cytotoxicity of peripheral lymphocytes to allogeneic blastoid cells, were enhanced in most cases while in remission. In some patients evidence for the development of immune response to autochthonous leukemic cells was obtained. This seems to indicate the rationale for immunotherapy. The toxicity due to **BCG** immunotherapy largely depended on the route of **administration**. These complications include malaise, fever, hepatic dysfunction, granulomatous **hepatitis**, and generalized tuberculosis. No major toxicity was observed in CWS-**treated** patients.

(FILE 'MEDLINE' ENTERED AT 10:03:34 ON 29 JAN 2003)

L21	12854	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	"CELL WALL"/CT
L22	9164	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	MYCOBACTERIUM/CT
L23	266	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L21 AND L22
L24	11	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L23 AND ADMINISTRATION & DOSAGE/CT
L25	5	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L24 AND (THERAPY OR THERAPEUTIC USE)/CT
L21	12854	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	"CELL WALL"/CT
L22	9164	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	MYCOBACTERIUM/CT
L23	266	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	L21 AND L22
L26	26749	SEA	FILE=MEDLINE	ABB=ON	PLU=ON	"AUTOIMMUNE DISEASES"/CT

Searcher : Shears 308-4994

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L27

1 SEA FILE=MEDLINE ABB=ON PLU=ON L23 AND L26

L28

6 L25 OR L27

L28 ANSWER 1 OF 6 MEDLINE

AN 85082136 MEDLINE

TI Phase I study of intravenous mycobacterial cell wall skeleton and trehalose dimycolate attached to oil droplets.

AU Vosika G; Giddings C; Gray G R

SO JOURNAL OF BIOLOGICAL RESPONSE MODIFIERS, (1984 Dec) 3 (6) 620-6.  
Journal code: 8219656. ISSN: 0732-6580.

AB The toxic, clinical, and immunological effects of suspensions of mycobacterial cell wall skeleton (CWS) and trehalose dimycolate (TDM) attached to oil droplets and given intravenously in doses of 100-2,000 micrograms/m<sup>2</sup> (CWS) every 1 or 2 weeks was investigated in this Phase I study. The major limiting side effects were fever and chills at a dose of 2 mg/m<sup>2</sup> body surface area. There was no significant hematopoietic, renal, hepatic, or pulmonary toxicity. Evaluation of changes in the white cell count and lymphocyte and monocyte populations and function showed an increase in the white blood count, an increase in the number of T cells, and a decrease in blood monocytes. Measurements of lymphocyte blastogenesis, monocyte suppressor activity, and monocyte cytostasis showed no consistent changes. Intravenous therapy with oil/CWS/TDM was associated with complete regression of a bronchial squamous cell carcinoma in one of three patients receiving 2 mg/m<sup>2</sup> weekly. Subsequent Phase II studies can be conducted at a weekly dose of 1-2 mg/m<sup>2</sup>.

L28 ANSWER 2 OF 6 MEDLINE

AN 80001479 MEDLINE

TI Intralesional immunotherapy of malignant melanoma with mycobacterium smegmatis cell wall skeleton combined with trehalose dimycolate (P3).

AU Vosika G J; Schmidtke J R; Goldman A; Ribi E; Parker R; Gray G R

SO CANCER, (1979 Aug) 44 (2) 495-503.  
Journal code: 0374236. ISSN: 0008-543X.

AB The clinical efficacy of intralesional immunotherapy utilizing Mycobacterium smegmatis cell wall skeleton (CWS) and trehalose dimycolate attached to oil droplets was investigated in 15 patients with advanced malignant melanoma. Patients received 300 microgram to 1050 microgram of the CWS combined with one-half that amount of trehalose dimycolate every 1 to 2 weeks for a total of 8 treatments. Therapy was continued if regression of injected lesions only occurred. Therapy was discontinued if regression of noninjected disease also occurred. Six of the 15 patients had regression of at least one injected lesion. Four of these 6 patients also had regression of noninjected disease lasting 4+, 6, 16 and 18+ months. Response was highly related to immune status. Six (83%) of 7 patients who reacted to one of a battery of skin tests responded. All 8 patients who did not react to skin tests failed to respond to therapy. There was no correlation of response with sex, prior therapy, disease-free interval or presence of visceral disease. Mycobacterial CWS and trehalose dimycolate is an effective immunotherapeutic agent. Additional studies of purified immunoadjuvants are warranted.

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L28 ANSWER 3 OF 6 MEDLINE  
AN 76003599 MEDLINE  
TI Antitumor activity of cell-wall skeletons and peptidoglycolipids of mycobacteria and related microorganisms in mice and rabbits.  
AU Azuma I; Taniyama T; Hirao F; Yamamura Y  
SO GANN, (1974 Dec) 65 (6) 493-505.  
Journal code: 8214471. ISSN: 0016-450X.

L28 ANSWER 4 OF 6 MEDLINE  
AN 75029441 MEDLINE  
TI Immunotherapy of guinea pig cancer with BCG.  
AU Zbar B  
SO JOHNS HOPKINS MEDICAL JOURNAL. SUPPLEMENT, (1974) 3 121-30.  
Journal code: 0334432. ISSN: 0091-7400.

L28 ANSWER 5 OF 6 MEDLINE  
AN 74173675 MEDLINE  
TI Immunotherapy of cancer: regression of established intradermal tumors after intralesional injection of mycobacterial cell walls attached to oil droplets.  
AU Zbar B; Ribí E; Meyer T; Azuma I; Rapp H J  
SO JOURNAL OF THE NATIONAL CANCER INSTITUTE, (1974 May) 52 (5) 1571-7.  
Journal code: 7503089. ISSN: 0027-8874.

L28 ANSWER 6 OF 6 MEDLINE  
AN 74173430 MEDLINE  
TI [Arthrogenic activity of various mycobacterial preparations].  
Activite arthrogene de diffentes preparations mycobacteriennes.  
AU Audibert F; Parant M; Petit J F; Adam A  
SO COMPTES RENDUS HEBDOMADAIRES DES SEANCES DE L ACADEMIE DES SCIENCES.  
D: SCIENCES NATURELLES, (1973 Nov 12) 277 (19) 2097-100.  
Journal code: 7501107. ISSN: 0567-655X.

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PHIC, PHIN, TOXCENTER, CANCERLIT' ENTERED AT 10:24:37 ON 29 JAN 2003)

L29 26 SEA ABB=ON PLU=ON "BAXTER A"?/AU AND (MYCOBACTER? OR (MYCOBACTER? OR M) (W) (TUBERCULOSIS OR VACCAE OR BOVIS) OR BCG OR CALMETTE GUERIN)  
L30 24 SEA ABB=ON PLU=ON L29 AND (TREAT? OR THERAP?)  
L31 7 DUP REM L30 (17 DUPLICATES REMOVED)

L31 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 1  
ACCESSION NUMBER: 2001:725142 HCAPLUS  
DOCUMENT NUMBER: 136:277577  
TITLE: The NOD mouse as a model of SLE  
AUTHOR(S): Silveira, Pablo A.; **Baxter, Alan G.**  
CORPORATE SOURCE: Centenary Institute of Cancer Medicine and Cell Biology, Newtown, NSW 2042, Australia  
SOURCE: Autoimmunity (2001), 34(1), 53-64  
CODEN: AUIMEI; ISSN: 0891-6934  
PUBLISHER: Harwood Academic Publishers  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English  
AB A review. In addn. to developing a high incidence of type 1 diabetes caused by a specific autoimmune response against pancreatic .beta. cells in the islets of Langerhans, NOD mice also demonstrate spontaneous autoimmunity to other targets including the thymus,

Searcher : Shears 308-4994

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adrenal gland, salivary glands, thyroid, testis, nuclear components and red blood cells. Moreover, **treatment** of pre-diabetic NOD mice with an i.v. dose of heat killed **Mycobacterium bovis** (*M. bovis*; bacillus Calmette-Guerin (BCG)) protects them from developing type 1 diabetes, but instead ppts. an autoimmune rheumatic disease similar to systemic lupus erythematosus (SLE), characterized by accelerated and increased incidence of hemolytic anemia (HA), anti-nuclear autoantibody (ANA) prodn., exacerbation of sialadenitis, and the appearance of immune complex-mediated glomerulonephritis (GN). The reciprocal switching between the two phenotypes by a single environmental trigger (**mycobacterial** exposure) raised the possibility that genetic susceptibility for type 1 diabetes and SLE may be conferred by a single collection of genes in the NOD mouse. This review will focus on the genetic components predisposing NOD mice to SLE induced by **BCG treatment** and compare them to previously detd. diabetes susceptibility genes in this strain and SLE susceptibility genes in the BXSB, MRL and the New Zealand mouse strains.

REFERENCE COUNT: 93 THERE ARE 93 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 2  
ACCESSION NUMBER: 1998:338147 HCAPLUS  
DOCUMENT NUMBER: 129:27000  
TITLE: **Mycobacterium** cell wall compositions  
INVENTOR(S): **Baxter, Alan George**  
PATENT ASSIGNEE(S): Amrad Operations Pty. Ltd., Australia; Baxter, Alan George  
SOURCE: PCT Int. Appl., 32 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9820900	A1	19980522	WO 1997-AU770	19971113
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9749345	A1	19980603	AU 1997-49345	19971113
AU 726734	B2	20001116		
EP 948350	A1	19991013	EP 1997-911956	19971113
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			

PRIORITY APPLN. INFO.: AU 1996-3593 A 19961113  
WO 1997-AU770 W 19971113

AB The present invention relates generally to a method of immunomodulating **therapy** and pharmaceutical compns. useful

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for same. More particularly, the present invention provides a method of ameliorating the effects of autoimmune conditions. Even more particularly, the present invention contemplates a method for preventing, delaying onset of or otherwise ameliorating the effects of insulin-dependant diabetes mellitus (IDDM) by administering a cell wall subunit or a chem. or functional equiv. thereof from **Mycobacterium** or a related organism or other suitable biol. source. The present invention is further directed to a pharmaceutical compn. useful in preventing, delaying onset of, curing, curing in assocn. with islet replacement or otherwise ameliorating the effects of autoimmune conditions such as IDDM or for enhancing an immune response against melanoma or other cancer comprising a cell wall subunit or a chem. or functional equiv. thereof from **Mycobacterium** or a related organism or other suitable biol. source. The cell wall subunit is preferably mycolyl-arabinogalactan-peptidoglycan (MAPG) or a component thereof.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L31 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 3  
ACCESSION NUMBER: 1998:586893 HCAPLUS  
DOCUMENT NUMBER: 129:301590  
TITLE: Characterization and specificity of B-cell  
responses in lupus induced by  
**Mycobacterium bovis** in NOD/Lt  
mice  
AUTHOR(S): Horsfall, A. C.; Howson, R.; Silveira, P.;  
Williams, D. G.; **Baxter, A. G.**  
CORPORATE SOURCE: Kennedy Institute of Rheumatology, Hammersmith,  
London, UK  
SOURCE: Immunology (1998), 95(1), 8-17  
CODEN: IMMUA; ISSN: 0019-2805  
PUBLISHER: Blackwell Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB A single dose of pasteurized **Mycobacterium bovis** administered i.v. to prediabetic non-obese diabetic (NOD) mice prevented the onset of type I diabetes but pptd. a systemic autoimmune rheumatic disease (ARD) similar to systemic lupus erythematosus. This syndrome was characterized by hemolytic anemia, anti-dsDNA and anti-Smith antigen (Sm) antinuclear autoantibodies, increased severity of sialadenitis, and glomerular immune complex deposition. Here the specificity of the autoantibody responses in **M. bovis-treated** NOD mice was examined. Large amts. of antibody were detected to the Sm/ribonucleoprotein (RNP) complex, of which the 28,000 MW polypeptide appeared to be immunodominant. The IgG subclass involved in the anti-Sm response was primarily IgG2a. Antibodies against dsDNA were also detected, but the subclass of this response was mixed, with IgG2a and IgG2b being present in equal amts. Together, these findings argue against a role for immune deviation towards T helper type 2 (Th2) responses in pathogenesis of the disease. The anti-dsDNA and anti-Sm reactivities were not mediated by polyreactive antibodies since neither antigen could cross-compete plasma antibody binding to the other in competitive ELISA. The role of polyclonal B-cell activation was examd. by measuring total .gamma.-globulin as well as IgG reactive with other nuclear antigens including Ro60, Ro52 and

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La, which although not a major component of the autoantibody responses in these mice, did show small but significant increases following immunization with **M. bovis**. Thus polyclonal stimulation, while likely to be occurring, was not directly responsible for prodn. of anti-Sm antibodies.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 4  
ACCESSION NUMBER: 1996:696528 HCAPLUS  
DOCUMENT NUMBER: 126:6272  
TITLE: Regulation of autoimmune diabetes:  
Characteristics of non-islet-antigen specific  
**therapies**  
AUTHOR(S): Gazda, Lawrence S.; **Baxter, Alan G.**;  
Lafferty, Kevin J.  
CORPORATE SOURCE: John Curtin School Medical Research, National  
University, Canberra, Australia  
SOURCE: Immunology and Cell Biology (1996), 74(5),  
401-407  
CODEN: ICBIEZ; ISSN: 0818-9641  
PUBLISHER: Blackwell  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Non-islet-antigen specific **treatments** have been shown to alter the natural history of insulin dependent diabetes in both the non-obese diabetic (NOD) mouse and in recently diagnosed patients. However, concerns have been raised regarding the possibility that non-islet-antigen specific **therapy** may trade cell mediated autoimmunity for antibody dependent autoimmunity. Female NOD mice at approx. 70 days of age were **treated** with the non-islet-antigen specific agents complete Freund's adjuvant (CFA) and Bacillus **Calmette-Guerin (BCG)** and assayed for the development of antibody mediated autoimmunity at 300 days of age. Autoantibodies to red cells were not detected in any of the **BCG** (n = 19) or CFA (n = 15) **treated** animals, while 2 of 13 age-matched NOD animals had autoantibodies to red cells, shown by a pos. direct Coomb's test. Anti-nuclear autoantibodies and complement deposition in the renal glomeruli were not significantly increased in the **treated** animals as compared to age-matched non-diabetic mice. The relative effectiveness of CFA and **BCG treatment** was examd. in terms of the ability of these agents to preserve insulin contg. islets. Complete Freund's adjuvant **treatment** was found to be more effective in preserving insulin contg. islets when compared to **BCG treatment**. This study demonstrates that it is possible to inhibit the development of autoimmune diabetes without increasing the probability that **treated** animals will develop antibody dependent autoimmunity.

L31 ANSWER 5 OF 7 MEDLINE  
ACCESSION NUMBER: 94239062 MEDLINE  
DOCUMENT NUMBER: 94239062 PubMed ID: 7910264  
TITLE: Peptide **therapy** for diabetes.  
AUTHOR: **Baxter A G**; Cooke A  
SOURCE: LANCET, (1994 May 7) 343 (8906) 1169.

Searcher : Shears 308-4994

09/308192

PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Letter  
LANGUAGE: English  
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals  
ENTRY MONTH: 199406  
ENTRY DATE: Entered STN: 19940621  
Last Updated on STN: 19950206  
Entered Medline: 19940610

L31 ANSWER 6 OF 7 MEDLINE DUPLICATE 5

ACCESSION NUMBER: 94278440 MEDLINE  
DOCUMENT NUMBER: 94278440 PubMed ID: 8009175  
TITLE: **Mycobacteria** precipitate autoimmune  
rheumatic disease in NOD mice via an adjuvant-like  
activity.  
AUTHOR: **Baxter A G**; Healey D; Cooke A  
CORPORATE SOURCE: Department of Pathology, University of Cambridge, UK.  
SOURCE: SCANDINAVIAN JOURNAL OF IMMUNOLOGY, (1994 Jun) 39 (6)  
602-6.  
Journal code: 0323767. ISSN: 0300-9475.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199407  
ENTRY DATE: Entered STN: 19940729  
Last Updated on STN: 19940729  
Entered Medline: 19940719

AB NOD mice spontaneously develop organ-specific autoimmunity and are widely used as a model for diabetes. NOD mice also exhibit some features of non-organ specific autoimmune rheumatic disease such as thymocytotoxic and anti-nuclear autoantibodies and they develop haemolytic anaemia in senescence. A single dose of  $2.6 \times 10^7$  heat-killed *Bacillus Calmette-Guerin* (**BCG**) i.v. in 8-week-old NOD mice prevented diabetes but precipitated a syndrome similar to systemic lupus erythematosus (SLE), in which **treated** mice rapidly developed haemolytic anaemia, high titre anti-DNA and anti-Sm antinuclear autoantibodies, perivascular lymphocytic infiltration in the kidneys and glomerular immune complex deposition. Here, we examined the mechanism of action by which **BCG** precipitated rheumatic autoimmune disease in NOD mice. Two weeks after injection, reticuloendothelial cell function was dramatically increased in **BCG-treated** NOD mice. By 4 weeks, **treated** mice had a three- to four-fold increase in Mac-1+ and class-II+, B220-negative splenocytes and in vitro antigen-presentation capacity was enhanced two- to four-fold. In vivo responses to SRBC confirmed enhancement of DTH 4 weeks after **BCG** injection, consistent with an adjuvant-like activity.

L31 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 6

ACCESSION NUMBER: 1994:678649 HCAPLUS  
DOCUMENT NUMBER: 121:278649  
TITLE: **Mycobacteria** precipitate an SLE-like  
syndrome in diabetes-prone NOD mice  
AUTHOR(S): **Baxter, A. G.**; Horsfall, A. C.;  
Healey, D.; Ozegbe, P.; Day, S.; Williams, D.

Searcher : Shears 308-4994



09/308192

CORPORATE SOURCE: G.; Cooke, A.  
SOURCE: Dep. Pathology, Cambridge Univ., Cambridge, UK  
Immunology (1994), 83(2), 227-31  
CODEN: IMMUAM; ISSN: 0019-2805  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Non-obese diabetic (NOD) mice spontaneously develop organ-specific autoimmunity and are widely used as a model for diabetes. Aged NOD mice also exhibit some features of non-organ-specific autoimmune rheumatic disease such as anti-nuclear antibodies and late-onset hemolytic anemia. Here, we report that a single dose of 2.6 .times. 10<sup>7</sup> heat-killed bacillus **Calmette-Guerin** (**BCG**) i.v. in 8-wk-old NOD mice prevented diabetes but pptd. a syndrome similar to systemic lupus erythematosus (SLE). **Treated** mice developed hemolytic anemia, anti-DNA and anti-Sm anti-nuclear autoantibodies and an increased severity of sialadenitis. Perivascular lymphocytic infiltration in the kidneys and glomerular immune complex deposition were also found. The action of **BCG** appeared to be mediated by an adjuvant-like activity as **treated** mice showed a substantial increase in reticuloendothelial cell function and enhanced antigen presentation capacity.

FILE 'HOME' ENTERED AT 10:26:49 ON 29 JAN 2003

09/308192

FILE 'HCAPLUS' ENTERED AT 10:49:44 ON 29 JAN 2003

L32 1 S L11 AND (THYROIDIT? OR ANEMIA)  
L33 0 S L32 NOT L18

-key terms

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PHIC, PHIN, TOXCENTER, CANCERLIT' ENTERED AT 10:51:03 ON 29 JAN 2003

L34 1 S L32  
L35 0 S L34 NOT L19

FILE 'HCAPLUS' ENTERED AT 10:53:23 ON 29 JAN 2003

L36 86 SEA FILE=HCAPLUS ABB=ON PLU=ON GMDP  
L37 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND (MYCOBACTER? OR (MYCOBACTER? OR M) (W) (TUBERCULOSIS OR VACCAE OR BOVIS) OR BCG OR CALMETTE GUERIN)  
L38 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L37 AND (TREAT? OR THERAP? OR PREVENT?)

L38 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:359539 HCAPLUS

DOCUMENT NUMBER: 131:169227

TITLE: Nitrotyrosine formation after activation of murine macrophages with **mycobacteria** and **mycobacterial** lipoarabinomannan

AUTHOR(S): Venkataprasad, N.; Riveros-Moreno, V.; Sosnowska, D.; Moreno, C.

CORPORATE SOURCE: MRC Tuberculosis and Related Infections Unit, MRC Clinical Sciences Centre, Royal Postgraduate Medical School, London, UK

SOURCE: Clinical and Experimental Immunology (1999), 116(2), 270-275

CODEN: CEXIAL; ISSN: 0009-9104

PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Murine peritoneal macrophages, elicited with thioglycolate, were stimulated in vitro with lipopolysaccharide (LPS). The prodn. of nitrite, superoxide anion (SOA), and the accumulation of nitrotyrosine in the cells increased after **treatment**, and all were inhibitable by the NO synthase inhibitor NG-monomethyl-L-arginine monoacetate (L-NMMA). This effect suggests a direct correlation between the accumulation of those metabolites and NO synthase activity. Lipoarabinomannan (LAM) purified from **Mycobacterium tuberculosis** was added to peritoneal macrophages in the presence of interferon-gamma (IFN-.gamma.); the cells produced nitrite and SOA, both inhibitable by L-NMMA. There was, as well, accumulation of nitrotyrosine in the macrophage proteins. Strikingly, the amt. of nitrotyrosine measured after LAM plus IFN-.gamma., or LAM plus the low mol. wt. adjuvant glutamylmuramyl dipeptide (**GMDP**), increased significantly in the presence of L-NMMA. These results suggest that murine macrophages, upon LAM stimulation, might generate reactive nitrogen metabolites by a route other than NO synthase. Nitrotyrosine accumulation after infection of macrophages in vitro, with either live bacille **Calmette-Guerin** (BCG) or live **M. tuberculosis**, in the presence or absence of IFN-.gamma., showed no correlation with nitrite prodn., suggesting a low superoxide prodn.

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE

09/308192

FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L38 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:620935 HCAPLUS

DOCUMENT NUMBER: 127:272304

TITLE: The effect of glucosaminylmuramyl dipeptide  
injection to mice on the course of tuberculous  
infection and in vitro superoxide anion  
production

AUTHOR(S): Venkataprasad, Nandagopal; Ledger, Philip;  
Ivanyi, Juraj

CORPORATE SOURCE: Tuberculosis and Related Infections Unit, MRC  
Clinical Sciences Centre, London, W12 ONN, UK

SOURCE: International Archives of Allergy and Immunology  
(1997), 114(1), 23-29  
CODEN: IAAIEG; ISSN: 1018-2438

PUBLISHER: Karger

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Immunotherapy as an adjunct to chemotherapy is of interest for  
optimizing **therapeutic** regimens for tuberculosis. In this  
context, we investigated the influence and mode of action of  
glucosaminylmuramyl dipeptide (**GMDP**) in mouse exptl.  
models. Intermittent injections of **GMDP** to  
**Mycobacterium tuberculosis**-infected mice reduced  
the viable bacilli in the lungs, but increased the counts in the  
spleens at 16 wk, but not at earlier harvests after infection.  
Injections of **GMDP** selectively ameliorated also in the  
lungs the spontaneous relapse of infection following chemotherapy.  
The mode of **GMDP** action was examd. in respect of  
superoxide anion prodn. The O2- prodn. by phorbol myristate-induced  
peritoneal macrophages in vitro was reduced by preinjection of mice  
with 100 .mu.g of **GMDP**. Notably, this outcome contrasts  
and can also override the previously known enhancing effect of MDP  
on O2- prodn. The inhibitory activity of **GMDP** became even  
more pronounced when testing macrophages from **Mycobacterium**  
**bovis BCG**-infected mice. However, these results  
do not explain readily the grounds for the contrasting effects of  
**GMDP** on the growth patterns of tubercle bacilli in the lungs  
and spleens. Although the obsd. effects on bacillary counts have  
been modest, such action of **GMDP** could represent a  
beneficial adjunct to suitably formulated chemotherapeutic regimens.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, PHIC,  
PHIN, TOXCENTER, CANCERLIT' ENTERED AT 10:57:15 ON 29 JAN 2003)

L39 15 S L37

L40 14 S L39 NOT L19

L41 5 DUP REM L40 (9 DUPLICATES REMOVED)

L41 ANSWER 1 OF 5

MEDLINE

DUPLICATE 1

ACCESSION NUMBER: 1999271055 MEDLINE

DOCUMENT NUMBER: 99271055 PubMed ID: 10337018

TITLE: Nitrotyrosine formation after activation of murine  
macrophages with **mycobacteria** and  
**mycobacterial** lipoarabinomannan.

AUTHOR: Venkataprasad N; Riveros-Moreno V; Sosnowska D;  
Moreno C

Searcher : Shears 308-4994

09/308192

CORPORATE SOURCE: MRC Tuberculosis and Related Infections Unit, MRC  
Clinical Sciences Centre, Royal Postgraduate Medical  
School, UK.  
SOURCE: CLINICAL AND EXPERIMENTAL IMMUNOLOGY, (1999 May) 116  
(2) 270-5.  
Journal code: 0057202. ISSN: 0009-9104.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199906  
ENTRY DATE: Entered STN: 19990614  
Last Updated on STN: 19990614  
Entered Medline: 19990603

AB Murine peritoneal macrophages, elicited with thioglycollate, were stimulated in vitro with lipopolysaccharide (LPS). The production of nitrite, superoxide anion (SOA), and the accumulation of nitrotyrosine in the cells increased after treatment, and all were inhibitable by the NO synthase inhibitor NG-monomethyl-L-arginine monoacetate (L-NMMA). This effect suggests a direct correlation between the accumulation of those metabolites and NO synthase activity. Lipoarabinomannan (LAM) purified from **Mycobacterium tuberculosis** was added to peritoneal macrophages in the presence of interferon-gamma (IFN-gamma); the cells produced nitrite and SOA, both inhibitable by L-NMMA. There was, as well, accumulation of nitrotyrosine in the macrophage proteins. Strikingly, the amount of nitrotyrosine measured after LAM plus IFN-gamma, or LAM plus the low molecular weight adjuvant glutamylmuramyl dipeptide (GMDP), increased significantly in the presence of L-NMMA. These results suggest that murine macrophages, upon LAM stimulation, might generate reactive nitrogen metabolites by a route other than NO synthase. Nitrotyrosine accumulation after infection of macrophages in vitro, with either live bacille **Calmette-Guerin** (BCG) or live **M. tuberculosis**, in the presence or absence of IFN-gamma, showed no correlation with nitrite production, suggesting a low superoxide production.

L41 ANSWER 2 OF 5 MEDLINE DUPLICATE 2  
ACCESSION NUMBER: 1998369664 MEDLINE  
DOCUMENT NUMBER: 98369664 PubMed ID: 9704041  
TITLE: Evidence of differential **mycobacterial**  
growth and modulation of **mycobactericidal**  
property by glucoaminylmuramyl dipeptide in murine  
macrophages.  
AUTHOR: Venkataprasad N  
CORPORATE SOURCE: Medical Research Council, Tuberculosis and Related  
Infections Unit, Hammersmith Hospital, London, United  
Kingdom.. nvenkata@rpms.ac.uk  
SOURCE: ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, (1997 Dec  
15) 832 117-29.  
Journal code: 7506858. ISSN: 0077-8923.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199808  
ENTRY DATE: Entered STN: 19980910

Searcher : Shears 308-4994

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Last Updated on STN: 19980910

Entered Medline: 19980828

AB These results show that given a source of mouse tissue macrophage, there is differential **mycobacterial** growth with different species of **mycobacteria**. This suggests that each species of **mycobacteria** generates a differential response in a given tissue macrophage within the same host for its survival. For example, **BCG-P** growth becomes permissive in the presence of **GMP** in splenic and peritoneal macrophages. Whereas in the same tissue **M. tuberculosis** growth becomes non-permissive. From Table 2 it is evident that inhibition of inflammatory responses following **M. tuberculosis** infection leads to reduction of viable organisms in murine macrophages.

L41 ANSWER 3 OF 5 MEDLINE DUPLICATE 3  
ACCESSION NUMBER: 97447587 MEDLINE  
DOCUMENT NUMBER: 97447587 PubMed ID: 9303327  
TITLE: The effect of glucosaminylmuramyl dipeptide injection to mice on the course of tuberculous infection and in vitro superoxide anion production.  
AUTHOR: Venkataprasad N; Ledger P; Ivanyi J  
CORPORATE SOURCE: Tuberculosis and Related Infections Unit, MRC Clinical Sciences Centre, London, UK.  
SOURCE: INTERNATIONAL ARCHIVES OF ALLERGY AND IMMUNOLOGY, (1997 Sep) 114 (1) 23-9.  
Journal code: 9211652. ISSN: 1018-2438.  
PUB. COUNTRY: Switzerland  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199710  
ENTRY DATE: Entered STN: 19971024  
Last Updated on STN: 19971024  
Entered Medline: 19971010

AB Immunotherapy as an adjunct to chemotherapy is of interest for optimizing therapeutic regimens for tuberculosis. In this context, we investigated the influence and mode of action of glucosaminylmuramyl dipeptide (**GMP**) in mouse experimental models. Intermittent injections of **GMP** to **Mycobacterium tuberculosis**-infected mice reduced the viable bacilli in the lungs, but increased the counts in the spleens at 16 weeks, but not at earlier harvests after infection. Injections of **GMP** selectively ameliorated also in the lungs the spontaneous relapse of infection following chemotherapy. The mode of **GMP** action was examined in respect of superoxide anion production. The O<sub>2</sub> production by phorbol myristate-induced peritoneal macrophages in vitro was reduced by preinjection of mice with 100 microg of **GMP**. Notably, this outcome contrasts and can also override the previously known enhancing effect of MDP on O<sub>2</sub>- production. The inhibitory activity of **GMP** became even more pronounced when testing macrophages from **Mycobacterium bovis BCG**-infected mice. However, these results do not explain readily the grounds for the contrasting effects of **GMP** on the growth patterns of tubercle bacilli in the lungs and spleens. Although the observed effects on bacillary counts have been modest, such action of **GMP** could represent a beneficial adjunct to suitably

Searcher : Shears 308-4994

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formulated chemotherapeutic regimens.

L41 ANSWER 4 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
DUPLICATE 4

ACCESSION NUMBER: 1989:427460 BIOSIS

DOCUMENT NUMBER: BA88:85718

TITLE: EXPERIMENTAL STUDY OF THE IMMUNOMODULATING ACTION OF  
GLUCOSAMINYLMURAMYLDIPEPTIDE **GMP**  
COMMUNICATION II **GMP** INFLUENCE ON CELLULAR  
IMMUNITY.

AUTHOR(S): MAN'KO V M; SKVORTSOV V YU; MASTERNAK T B; LARIN A S;  
RUDNEVA T B; OSIPOVA E YU; IVANOVA A S; ANDRONOVA T  
M; IVANOV V T; ZABANOVA E V

CORPORATE SOURCE: INST. IMMUNOL., MINIST. HEALTH USSR, MOSCOW, USSR.

SOURCE: IMMUNOLOGIYA, (1989) 0 (1), 38-41.

CODEN: IMMLDW.

FILE SEGMENT: BA; OLD

LANGUAGE: Russian

AB Immunomodulating action of **GMP** on cellular immunity was  
assayed with the use of the following tests: delayed  
hypersensitivity (DHS), macrophage inhibition (MI),  
graft-versus-host (GVH), endogenous colony-formation. It was  
established that the compound administered by any of the methods  
used (intraperitoneally, subcutaneously, orally, simultaneously  
with, or 24 h after sensitization), in doses of 0.1-5000  
.mu.g/mouse, produced no effect on the intensity of DHS to sheep red  
blood cells. In **BCG**-sensitized mice **GMP** in a  
dose of 100 .mu.g/mouse induced at three-fold increase in the test  
animals' splenocyte migration inhibition. The compound used in doses  
of 0.01-1,000 .mu.g/mouse did not influence the GVH test estimated  
by allogeneic lymphocyte-induced inactivation of endogenous  
colony-formation. This test has also shown that **GMP**  
possesses no mitostatic or lymphotoxic properties.

L41 ANSWER 5 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 1989:448583 BIOSIS

DOCUMENT NUMBER: BA88:96855

TITLE: EXPERIMENTAL STUDY OF THE IMMUNOMODULATING ACTION OF  
GLUCOSAMINYLMURAMYLDIPEPTIDE **GMP**  
INFLUENCE OF **GMP** ON THE MACROPHAGE  
COMPONENT OF IMMUNE RESPONSE ACTIVATION OF T AND  
B-LYMPHOCYTES AND THEIR COOPERATIVE INTERACTION.

AUTHOR(S): MAN'KO V M; SKVORTSOV V YU; MASTERNAK T B; IVANOVA A  
S; GUBAREV M I; ANFALOVA T V; LARIN A S; LUTSAN N I;  
OSIPOVA E I; ET AL

CORPORATE SOURCE: INST. IMMUNOL., MINIST. HEALTH USSR, MOSCOW, USSR.

SOURCE: IMMUNOLOGIYA, (1989) 0 (2), 23-26.

CODEN: IMMLDW.

FILE SEGMENT: BA; OLD

LANGUAGE: Russian

AB The results of the investigation of **GMP** influence on  
certain components of the immune response have been presented. The  
study of the mechanisms of **GMP** immunomodulating action  
has revealed that the compound capacity to intensify the humoral  
immune response is not mediated by B-cell polyclonal stimulation or  
by the influence on T- and B-lymphocyte cooperative interaction. An  
experiment simulating of splenic macrophage migration from an  
agarose drop has demonstrated that **GMP** in doses of

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0.001-1000 .mu.g/ml in culture medium does not influence splenocyte migration activity in intact mice, but increases macrophage spontaneous migration in BCG-immunized mice. Besides that, GMDP in doses of 100 and 1000 .mu.g intensifies phagocytic activity of macrophages in vivo, estimated by the clearance of colloid India ink particles. The lymphocyte blast-transformation test has evidenced that GMDP in vitro has no mitogenic activity, however, under lipopolysaccharide and, to a less extent, Con A effects GMDP significantly intensifies lymphocyte blast-transformation.

FILE 'HOME' ENTERED AT 10:58:19 ON 29 JAN 2003

Searcher : Shears 308-4994

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COUNTRY COUNT: BRIGHAM WOMENS HOSPITAL INC  
86  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9952547	A1	19991021	(199953)*	EN	49
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC					
MW NL OA PT SD SE SL SZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES					
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK					
LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG					
SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW					
AU 9935588	A	19991101	(200013)		
EP 1071452	A1	20010131	(200108)	EN	
R: AT BE DE ES FI FR GB IE IT SE					
JP 2002511421 W		20020416	(200242)		52

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9952547	A1	WO 1999-US8112	19990413
AU 9935588	A	AU 1999-35588	19990413
EP 1071452	A1	EP 1999-917473	19990413
		WO 1999-US8112	19990413
JP 2002511421 W		WO 1999-US8112	19990413
		JP 2000-543157	19990413

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9935588	A Based on	WO 9952547
EP 1071452	A1 Based on	WO 9952547
JP 2002511421 W	Based on	WO 9952547

PRIORITY APPLN. INFO: US 1998-81638P 19980413

AN 1999-620288 [53] WPIDS

AB WO 9952547 A UPAB: 20011203

NOVELTY - A method of enhancing an immune response in a mammal to at least one CD1 antigen is new and comprises co-administering to the mammal an effective amount of at least one CD1 antigen and at least one T cell stimulating compound.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a method of vaccinating a mammal against at least one CD1 antigen comprising administering to the mammal an effective amount of at least one CD1 antigen and at least one adjuvant;

(2) a method of stimulating a CD1-restricted immune response in a mammal comprising administering to the mammal a composition comprising at least one adjuvant and at least one lipid antigen where the antigen elicits a CD1-restricted immune response;

(3) an immunogenic composition (I), comprising:

(a) at least one T cell stimulating compound; and

(b) at least one CD1 antigen, where the CD1 antigen elicits a CD1-restricted immune response;



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(4) a method for eliciting an immunogenic response in a mammal comprising **administering** (I);

(5) a vaccine composition (II) comprising at least one adjuvant and at least one lipid antigen where the lipid antigen elicits a CD1-restricted immune response;

(6) a method for vaccinating a mammal comprising **administering** (II); and

(7) a kit comprising at least one T-cell stimulating compound and at least one CD1 antigen where the CD1 antigen elicits a CD1-restricted immune response.

ACTIVITY - Anti-parasitic; antibacterial; immune stimulant.

MECHANISM OF ACTION - The method elicits at least one immunological parameter e.g. antibody response the antigen, cytotoxic T-lymphocyte response, T-cell proliferation, helper T-cell response or a T-cell modulated cytokine response.

USE - The method is useful for enhancing or boosting the immune response of an individual who has a immuno-compromised **disease, disorder** or condition (e.g. AIDS or chemotherapy recipient). The method is also useful for eliciting or boosting an immune response for at least one bacterial infection (e.g. **Mycobacteria** genus, Hemophilus genus, Streptococcus genus, Staphylococcus genus and Chlamydia) and/or at least one parasitic infection (e.g. Plasmodium or Trypanosoma genus). (All claimed). The CD1 antigen can also be a tumor associated or derived antigen that is involved in **diseases** e.g. cancer (e.g. melanoma, breast cancer, prostate cancer, and colo-rectal cancer) or a self antigen that is involved in autoimmune **diseases** (e.g. **diabetes, Lupus, rheumatoid arthritis**).

ADVANTAGE - The method enhances the immune response for vaccines without eliciting a sufficient protective immune response in a host.

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L20 ANSWER 12 OF 45 JICST-EPlus COPYRIGHT 2003 JST

ACCESSION NUMBER: 990719297 JICST-EPlus

TITLE: Regulatory effects of cord factor (trehalose 6,6'-dimycolate) and a sulfolipid (2,3,6,6'-tetraacyltrehalose 2'-sulfate) on lung granuloma formation and TNF(Tumor necrosis factor) induction in mice.

AUTHOR: HIRAI MANABU

CORPORATE SOURCE: Osaka City Univ., Med. Sch.

SOURCE: Osakashi Igakkai Zasshi (Journal of the Osaka City Medical Center), (1999) vol. 48, no. 1/2, pp. 213-227. Journal Code: F0955A (Fig. 12, Ref. 46)  
ISSN: 0386-4103

PUB. COUNTRY: Japan

DOCUMENT TYPE: Journal; Article

LANGUAGE: Japanese

STATUS: New

AB Both cord factor (trehalose 6,6'-dimycolate) and sulfolipid (2,3,6,6'-tetraacyltrehalose 2'-sulfate) are major virulence factors of **Mycobacterium tuberculosis**. The mechanisms of virulence are not understood in detail. I examined the effect of sulfolipid on cord factor-induced granuloma formation in mice. The effects of similar mycoloyl glycolipids (glucose monomycolate, fructose monomycolate, and trehalose monomycolate) from Rhodococcus

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terrae 70012 on such granuloma formation and priming tumor necrosis factor(TNF) were examined, as well. Cord factor caused large granulomas in the lungs, spleen, and liver of ICR mice but the other glycolipids caused small ones. Sulfolipid caused little granuloma formation. Lungs form granulomas more readily than other organs, and **mycolic** acid is the key factor in granuloma formation, so I examined the in vitro stimulation of macrophages by various mycoloyl glycolipids and sulfolipid. Resident alveolar macrophages(AM) and peritoneal macrophages induced by proteose peptose and **treated** with several glycolipids produced TNF, with the alveolar macrophages producing more. Cord factor had highest inducibility of TNF from alveolar macrophages among all glycolipids tested. The TNF inducibility of cord factor and other glycolipids from alveolar macrophages was paralleled with their granuloma forming activity in lungs in mice. There were marked differences in TNF producibility from organ macrophages induced with glycolipids in vitro. Therefore, it was revealed that there was a close relationship between TNF production from alveolar macrophages and granuloma formation in lungs. Next, we tested on the effect of sulfolipid on the cord factor induced lung granuloma in mice. When cord factor was **administered** in combination with sulfolipid in dose responsive manner, granuloma formation was suppressed significantly. (author abst.)

L20 ANSWER 13 OF 45 WPIDS (C) 2003 THOMSON DERWENT DUPLICATE 4  
ACCESSION NUMBER: 1998-297615 [26] WPIDS  
DOC. NO. CPI: C1998-092759  
TITLE: Use of components of **Mycobacterium** cell walls - in immunomodulatory **therapy**, e.g., for **treatment** of autoimmune **disease** or for enhancing immune responses against cancer.  
DERWENT CLASS: B04 D16  
INVENTOR(S): BAXTER, A G  
PATENT ASSIGNEE(S): (AMRA-N) AMRAD OPERATIONS PTY LTD; (CENT-N) CENTENARY INST CANCER MEDICINE & CELL BI  
COUNTRY COUNT: 80  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9820900	A1	19980522	(199826)*	EN	32
RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
AU 9749345	A	19980603	(199842)		
EP 948350	A1	19991013	(199947)	EN	
R: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
AU 726734	B	20001116	(200103)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
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WO 9820900	A1	WO 1997-AU770	19971113
AU 9749345	A	AU 1997-49345	19971113
EP 948350	A1	EP 1997-911956	19971113
		WO 1997-AU770	19971113
AU 726734	B	AU 1997-49345	19971113

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9749345	A Based on	WO 9820900
EP 948350	A1 Based on	WO 9820900
AU 726734	B Previous Publ. Based on	AU 9749345 WO 9820900

PRIORITY APPLN. INFO: AU 1996-3593 19961113

AN 1998-297615 [26] WPIDS

AB WO 9820900 A UPAB: 19991122

Immunomodulatory **therapy** in mammals comprises **administering** one or more components of the cell wall of **Mycobacterium** (or a related organism), analogous components from another biological source, or chemical equivalents of these components.

Also claimed are: (1) a composition of matter, comprising mycolyl-**arabinogalactan-peptidoglycan** (**MAPG**), or a derivative, components or chemical equivalent of **MAPG**; and (2) isolation of components of **MAPG**, for use in **therapeutic** compositions for **preventing**, delaying onset of or ameliorating the effects of **diabetes** in mammals, or for use in immunomodulatory **therapy**, comprising: (a) preparing cell envelopes from a species of **Mycobacterium** (or a related organism) or other biological source; (b) subjecting the cell envelopes to glycolipid-removing means, to remove soluble glycolipids; (c) **treating** the product obtained to break the **mycolic** acids linkage, and isolating the **mycolic** acids; (d) **treating** the remaining complex to cleave the linkage at the rhamnose residue connecting **arabinogalactan** to the **peptidoglycan** backbone; and (e) separating and isolating **arabinogalactan** and **peptidoglycan**.

USE - The method may be used for **treatment** of an autoimmune **disease**, e.g., insulin-dependent **diabetes** mellitus (**IDDM**), thyroiditis, atrophic **gastritis** (type A), pernicious **anaemia**, **Addison's disease**, pemphigus **vulgaris**, multiple **sclerosis**, rheumatoid **arthritis**, haemolytic **anaemia**, idiopathic thrombocytopaenia, primary biliary **cirrhosis**, ulcerative **colitis**, **Sjogren's** syndrome or mixed connective tissue **disease**. It may be used for enhancing anti-tumour immune responses, e.g., against melanoma or bladder cancer. **Administration** of the cell wall components is, e.g., oral, topical or parenteral.

ADVANTAGE - The cell wall component(s) can **prevent diabetes** in NOD mice, without risk of precipitating systemic **lupus erythematosus** (which does occur with **administration** of Freund's complete adjuvant or **Mycobacterium bovis**).

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L20 ANSWER 14 OF 45 WPIDS (C) 2003 THOMSON DERWENT  
ACCESSION NUMBER: 1998-520769 [44] WPIDS  
DOC. NO. CPI: C1998-156311  
TITLE: Compositions useful in **treating** microbial  
infections and auto-immune **diseases** -  
comprising purified lipid cell wall  
component, especially **mycolic** acid from  
**Mycobacterium tuberculosis**.  
DERWENT CLASS: B04 D16  
INVENTOR(S): JOANNSEN, E; LENAERTS, A; VERSCHOOR, J A;  
JOHANNSEN, E  
PATENT ASSIGNEE(S): (ADCO-N) ADCOCK INGRAM LTD; (LEWI-I) LEWIN J H  
COUNTRY COUNT: 83  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9839025	A2	19980911	(199844)*	EN	243
RW: AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
AU 9866312	A	19980922	(199908)		
ZA 9801773	A	19991124	(200001)		243
EP 971733	A1	20000119	(200009)	EN	
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
AU 2000069646	A	20010201	(200112)	#	
EP 1098199	A1	20010509	(200128)	EN	
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
US 2002052412	A1	20020502	(200234)		
US 2002082296	A1	20020627	(200245)		
US 2002082297	A1	20020627	(200245)		
US 6433013	B1	20020813	(200255)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9839025	A2	WO 1998-GB681	19980303
AU 9866312	A	AU 1998-66312	19980303
ZA 9801773	A	ZA 1998-1773	19980303
EP 971733	A1	EP 1998-908232	19980303
		WO 1998-GB681	19980303
AU 2000069646	A Div ex	AU 1998-66312	19980303
		AU 2000-69646	20001031
EP 1098199	A1 Div ex	EP 1998-908232	19980303
		EP 2000-203989	19980303
US 2002052412	A1 CIP of Div ex	WO 1998-GB681	19980303
		US 1999-388725	19990902
		US 2001-847514	20010502
US 2002082296	A1 Div ex	US 1999-388725	19990902
		US 2001-847364	20010502
US 2002082297	A1 Div ex	US 1999-388725	19990902
		US 2001-847365	20010502

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US 6433013 B1 CIP of

WO 1998-GB681 19980303  
US 1999-388725 19990902

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9866312	A Based on	WO 9839025
EP 971733	A1 Based on	WO 9839025
EP 1098199	A1 Div ex	EP 971733

PRIORITY APPLN. INFO: ZA 1997-10300 19971114; ZA 1997-1817  
19970303; AU 2000-69646 20001031

AN 1998-520769 [44] WPIDS

AB WO 9839025 A UPAB: 20021014

The following are claimed:

(A) composition comprising:

(i) a purified lipid cell wall component ((PLCWC) or an analogue or derivative of this) and

(ii) a carrier or adjuvant;

(B) **treatment** of microbial infections or immune disorders, comprising **administering** a PLCWC (or analogue or derivative of this), or a composition or vaccine containing this;

(C) diagnosis of immune disorders, comprising:

(a) contacting a sample from a subject with a PLCWC (or analogue or derivative of this) or a composition containing this, and

(b) detecting any reaction between the component and the sample;

(D) separating and purifying a specific microbial cell wall component (of a carbohydrate or lipid nature), or an analogue or derivative of this, from an extracted or synthetic mixture of the cell wall components and contaminants, comprising:

(a) dissolving the mixture in a bi-phasic solvent containing sodium chloride, to form a solution;

(b) allowing the solution to separate to form an upper phase and a lower phase;

(c) subjecting the phases to countercurrent distribution/separation, to separate the microbial cell wall component of this) in the upper phase or the lower phase, and

(d) removing the separated microbial cell wall component from the upper or lower phase, and

(E) detection means for detecting the presence of antibodies to a purified **mycolic** acid, or mixture of purified **mycolic** acids, comprising:

(i) a solid phase, and

(ii) a purified **mycolic** acid (or mixture of purified **mycolic** acids) in a methyl ester form or a freshly re-saponified form, associated with the solid phase.

USE - The composition may be used in **treatment** of microbial infections (e.g. **mycobacterial** infections such as tuberculosis or leprosy), allergies or autoimmune disorders (e.g. **arthritis**). It may be used as a prophylactic agent which:

(i) enhances resistance or reduces susceptibility to a microbial infection,;

(ii) promotes an inflammatory response in an infected organ

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(e.g. the lungs) or  
(iii) modulates or manipulates the humoral or cellular immune system. The composition may also be used in diagnostic methods.  
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L20 ANSWER 15 OF 45 MEDLINE DUPLICATE 5  
ACCESSION NUMBER: 1998398017 MEDLINE  
DOCUMENT NUMBER: 98398017 PubMed ID: 9730249  
TITLE: Immunopharmacologic agents in the amelioration of hepatic injuries.  
AUTHOR: Farghali H; Masek K  
CORPORATE SOURCE: Institute of Pharmacology, First Faculty of Medicine, Charles University, Prague, Czech Republic.  
SOURCE: INTERNATIONAL JOURNAL OF IMMUNOPHARMACOLOGY, (1998 Apr-May) 20 (4-5) 125-39. Ref: 103  
Journal code: 7904799. ISSN: 0192-0561.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, TUTORIAL)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199812  
ENTRY DATE: Entered STN: 19990115  
Last Updated on STN: 19990115  
Entered Medline: 19981204

AB A number of immunomodulating agents of different origin have been shown to reduce liver injury of various etiologies. Immunostimulants like levamisole, **BCG**, a protein polysaccharide from myceria *Coriolus vesicolor* PS-K, a streptococcal preparation OK-432 and immunomodulators like N-acetylmuramyl-L-alanyl-D-isoglutamine (**MDP**) and its analogs. Selective T-cell suppressors like the polypeptide cyclosporine A (CsA) and the macrolide FK 506 (tacrolimus) have also been claimed to possess hepatoprotrophic or hepatoprotective properties at low doses. The aim of this review article is to highlight the interplay between the **administration** of immunomodulating agents and the amelioration of hepatic injuries. Hepatic effects of exogenous immunomodulators are discussed with special focus on the most widely used immunosuppressive agents, CsA and tacrolimus. An important question exists as to whether these potential hepatoprotective effects are related mechanistically to the immune system or are working at different levels. Due to the differences in effects and modes of actions of various immunoactive substances presented herein, a common mechanism for their cytoprotective effects cannot be formulated at this stage. Levamisole and cyanidanol may protect cells against necrosis by acting as free radical scavengers. **MDP** and its analogs reduce carbon tetrachloride-elevated (CCl4) lipid peroxides and their protective effects are primarily on hepatic cytoplasmic membranes where lipid peroxidation and calcium homeostasis interact. **MDP** reduced CCl4-elevated calcium in both intact hepatocytes and in the post microsomal supernatant suggest that the influx of extracellular calcium across plasma membrane is affected. Elevations of intracellular calcium above a threshold are involved in: the stimulation of Ca2+-sensitive enzymes such as phospholipase A2, endonucleases and proteases, the conversion of xanthine dehydrogenase to xanthine oxidase and the formation of free radicals, all of which disturb biomembranes.

MDP and its analogs, in a specific dose range, may act to maintain intracellular calcium within physiological ranges. Highly complex cellular signalling systems, including calcium, are involved in the explanation of the mechanism of the immunosuppressive effect of CsA and tacrolimus. The hepatoprotective effects of these selective immunosuppressive agents, however, are independent of the inhibition of T-cell activation. The cyclophilin and tacrolimus binding proteins of the mitochondria are the receptors for these compounds and play a key role in the regulation of mitochondrial permeability transition pores. CsA or tacrolimus inhibition of mitochondrial permeability transition pores does not require interaction with calcineurin, indicating a dissociation between immunosuppression and mitochondrial protection. The involvement of intracellular or intramitochondrial proteins in the modulation of mitochondrial permeability transition pores with the creation of a partially impermeable state for  $\text{Ca}^{2+}$  movement in drug-treated mitochondria and the dissociation of this effect from immunomodulatory actions potentially offers new and promising approaches for the development of new pharmacologicals targeted at therapeutic intervention. Clinical trials of these drugs as hepatoprotective agents are limited. Use of CsA in patients with primary biliary cirrhosis and autoimmune chronic hepatitis and in cirrhotic animal models produced by chronic administration of  $\text{CCl}_4$  have yielded encouraging results. It seems that this class of compounds may be of substantial benefit in liver protection against many pathological conditions where disturbance in mitochondrial function and in  $\text{Ca}^{2+}$  homeostasis appear to be prerequisites for cell injury.

L20 ANSWER 16 OF 45 JICST-EPlus COPYRIGHT 2003 JST

ACCESSION NUMBER: 970553352 JICST-EPlus  
 TITLE: Malignant Melanoma: Its Diagnosis and  
**Treatment. BRM Treatment. (XIII).**  
 AUTHOR: ISHIIHARA KAZUYUKI  
 CORPORATE SOURCE: Inst. Analyses of Prognostic Factors in Skin Cancer  
 SOURCE: Biotherapy (Tokyo), (1997) vol. 11, no. 4, pp.  
 571-577. Journal Code: L0028A (Fig. 6, Tbl. 4, Ref.  
 25)  
 ISSN: 0914-2223  
 PUB. COUNTRY: Japan  
 DOCUMENT TYPE: Journal; Commentary  
 LANGUAGE: Japanese  
 STATUS: New

AB Malignant melanomas are known to be antigenic tumors, and accordingly many BRM(biological response modifiers) have been used for them. These include living **BCG**, *Nocardia rubra*-CWS, **BCG**-CWS, tumor necrosis factor, whole **peptidoglycan**, MY-1 (deoxyribonucleic acid fraction from *mycobacterium bovis* **BCG**), OK-432 (Picibanyl), interferon, and interleukin. Among these, interferon-.BETA. (natural type) has been approved and shown to have an approximately 50% efficacy rate against skin metastases of malignant melanomas when **administered** intra-tumorally. Also, the combination of IFN-.BETA. and chemotherapy for IFN-.BETA.vDAV **treatment** has contributed to an improved prognosis when used in stages II and III. Adoptive immunotherapy has been also used for advanced-stage malignant melanomas. With the exception of certain research facilities, vaccine and gene **therapies** have not yet been

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made available for clinical use. (author abst.)

L20 ANSWER 17 OF 45 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.  
ACCESSION NUMBER: 97242733 EMBASE  
DOCUMENT NUMBER: 1997242733  
TITLE: The effect of glucosaminylmuramyl dipeptide injection to mice on the course of tuberculous infection and in vitro superoxide anion production.  
AUTHOR: Venkataprasad N.; Ledger P.; Ivanyi J.  
CORPORATE SOURCE: Prof. J. Ivanyi, MRC Clinical Sciences Centre, Tuberculosis Related Infections Unit, Hammersmith Hospital, London, W12 0NN, United Kingdom  
SOURCE: International Archives of Allergy and Immunology, (1997) 114/1 (23-29).  
Refs: 30  
ISSN: 1018-2438 CODEN: IAAIEG  
COUNTRY: Switzerland  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 004 Microbiology  
015 Chest Diseases, Thoracic Surgery and Tuberculosis  
026 Immunology, Serology and Transplantation  
037 Drug Literature Index  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB Immunotherapy as an adjunct to chemotherapy is of interest for optimizing **therapeutic** regimens for tuberculosis. In this context, we investigated the influence and mode of action of glucosaminylmuramyl dipeptide (GMDP) in mouse experimental models. Intermittent injections of GMDP to **Mycobacterium tuberculosis**-infected mice reduced the viable bacilli in the lungs, but increased the counts in the spleens at 16 weeks, but not at earlier harvests after infection. Injections of GMDP selectively ameliorated also in the lungs the spontaneous relapse of infection following chemotherapy. The mode of GMDP action was examined in respect of superoxide anion production. The O<sub>2</sub><sup>-</sup> production by phorbol myristate-induced peritoneal macrophages in vitro was reduced by preinjection of mice with 100  $\mu$ g of GMDP. Notably, this outcome contrasts and can also override the previously known enhancing effect of **MDP** on O<sub>2</sub><sup>-</sup> production. The inhibitory activity of GMDP became even more pronounced when testing macrophages from **Mycobacterium bovis BCG**-infected mice. However, these results do not explain readily the grounds for the contrasting effects of GMDP on the growth patterns of tubercle bacilli in the lungs and spleens. Although the observed effects on bacillary counts have been modest, such action of GMDP could represent a beneficial adjunct to suitably formulated chemotherapeutic regimens.

L20 ANSWER 18 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
ACCESSION NUMBER: 1997:356925 BIOSIS  
DOCUMENT NUMBER: PREV199799663328  
TITLE: **Prevention** of experimental autoimmune **diabetes** in mice by **treatment** with **mycobacteria** and their components.  
AUTHOR(S): Stosic-Grujicic, Stanislava (1); Vracar, Marina; Badovinac, Vladimir; Markovic, Milso; Lukic, Miodrag; Mostarica-Stojkovic, Marija

Searcher : Shears 308-4994



09/308192

CORPORATE SOURCE: (1) Inst. Biol. Res. Sinisa Stankovic, Sch. Med.,  
Belgrade Yugoslavia  
SOURCE: Mikrobiologija (Zemun), (1996) Vol. 33, No. 1, pp.  
27-36.  
ISSN: 0581-1538.

DOCUMENT TYPE: Article  
LANGUAGE: English  
SUMMARY LANGUAGE: English; Serbo-Croatian

AB The protective effects of **Mycobacteria** and some of their well-defined components on the development of experimental autoimmune **diabetes** were analyzed in CBA/H mice induced by multiple low doses of streptozotocin (MLD-SZ). **Administration** of CFA containing killed *M. phlei* together with the first of five SZ injections potentiated the induction of hyperglycemia, while single pre-**treatment** with CFA 1-3 weeks prior to MLD-SZ had a protective effect. Similarly, pre-**treatment** with TDM or PPD emulsified in IFA one week before the first SZ injection significantly reduced clinical signs of **IDDM**, as evaluated by the blood glucose level. However, **MDP** emulsion in IFA produced no protective effects. In order to test whether the observed protection could be in vivo transferred, in the next set of experiments, spleen cells were isolated from mice **treated** one week earlier with CFA, PPD or TDM and were given to naive syngeneic recipients together with the first dose of MLD-SZ. The suppression was successfully transferred with splenocytes from the CFA-**treated**, or PPD-**treated** donors, while cells from TDM-**treated** mice were completely ineffective. In order to get an insight into the molecular mechanisms underlying this suppression, at the time of transfer spleen cells were tested for the ability to produce nitric oxide (NO'). Nitrite determination showed that CFA-stimulated cells are the most potent producers of NO' in comparison to the other stimulated cells tested. Taken together, these results suggest that **Mycobacteria** generate various mechanisms of control of MLD-SZ induced **diabetes** mediated through macrophages and/or T cells, and that proteins derived from *M. tuberculosis* might be the main active component in protecting mice against the **disease**.

L20 ANSWER 19 OF 45 JICST-EPlus COPYRIGHT 2003 JST  
ACCESSION NUMBER: 970105919 JICST-EPlus  
TITLE: Application of Immunostimulants to Cancer and  
Infectious **Diseases**.  
AUTHOR: AZUMA ICHIRO  
CORPORATE SOURCE: Hokkaido Univ., Inst. of Immunological Sci.  
SOURCE: Jichi Ika Daigaku Kiyo (Jichi Medical School  
Journal), (1996) vol. 19, pp. 11-18. Journal Code:  
Y0820A (Fig. 2, Tbl. 1, Ref. 10)  
ISSN: 0387-0308  
PUB. COUNTRY: Japan  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: Japanese  
STATUS: New

AB In last two decade, we have worked on the development of immunostimulants and their application to the **prevention** and **therapy** of **diseases**. Previously we have reported the purification and biochemical properties of cell-wall skeletons (CWSs) of **Mycobacterium bovis**

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**BCG** and related bacteria. The immunological activities and application of **BCG-CWS** to cancer immunotherapy were examined in detail. Since the discovery of N-acetylmuramyl dipeptide (**MDP**) which is the minimal structural requirement for adjuvant activity of bacterial cell wall, the chemical synthesis and immunological studies of **MDP** derivatives and related compounds were extensively carried out. A **MDP** derivative, **MDP-Lys (L18)**, romurtide, was selected from synthetic acyl **MDP** derivatives by using *E. coli* infection model in mice. **MDP-Lys (L18)** was shown to **prevent** the bacterial, viral and fungal infections in mice models. Synergistic effect of **MDP-Lys (L18)** with antibiotics against bacterial and fungal infections was observed. It was shown that several cytokines such as IL-1, IL-6, G-CSF, TNF and IFNs were induced by the **administration** of **MDP-Lys (L18)** and the number of leukocytes and platelets were increased by the **administration** of **MDP-Lys (L18)**. **MDP-Lys (L18)** is now being applied for the restoration of white blood cells in cancer patients who were **treated** by radiation **therapy**. Recently, we have shown the efficacy of **MDP-Lys (L18)** and other synthetic immunostimulants in the augmentation of mucosal immunity by the **administration** of immunostimulants by oral, intranasal and intrarectal routes. The potentiation of immunogenicity of recombinant vaccinen was shown by the combination with immunostimulants. The cancer metastasis was also inhibited by **BCG-CWS** and other synthetic immunostimulants in mice. From these results, we conclude that the immunostimulants are very useful tool for the augmentation of host-defence mechanisms against infection and cancer. (author abst.)

L20 ANSWER 20 OF 45 MEDLINE DUPLICATE 6  
ACCESSION NUMBER: 95244404 MEDLINE  
DOCUMENT NUMBER: 95244404 PubMed ID: 7727351  
TITLE: Adjuvant-induced persistent photosensitivity models in guinea pigs. I. Induction of persistent photosensitivity.  
AUTHOR: Ichikawa H; Soma T; Hirao T; Sato Y; Fukushima S  
CORPORATE SOURCE: Institute for Advanced Skin Research Inc., Yokohama, Japan.  
SOURCE: JOURNAL OF DERMATOLOGICAL SCIENCE, (1995 Jan) 9 (1) 1-6.  
Journal code: 9011485. ISSN: 0923-1811.  
PUB. COUNTRY: Ireland  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199505  
ENTRY DATE: Entered STN: 19950608  
Last Updated on STN: 19950608  
Entered Medline: 19950526

AB Induction of persistent photosensitivity in guinea pigs was carried out in an attempt to induce a model suitable to clarify the mechanism of human persistent light reactors. Guinea pigs were **treated** with intradermal injection of adjuvant which consisted of desiccated **Mycobacteria** followed by topical application of hapten solution and irradiation with UVA. Unequivocal skin reactions were subsequently elicited with UVA exposure in the absence of hapten application. This enhanced UVA reactivity

Searcher : Shears 308-4994

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persisted and could be elicited for more than 2 years. In these guinea pigs, remarkably increased sensitivity to UVB was also observed. These animals appear quite similar to persistent light reactors among humans. Muramyl dipeptide used in place of **Mycobacteria** was also found to be effective in inducing photosensitivity to UVA. There were great differences of reactivity noted among different strains of guinea pig, suggesting that persistent photosensitivity is influenced by genetic background. Enhanced UV sensitivity was induced without hapten application, only with injections of adjuvant and UVA irradiation in the immunization procedure. These results suggest that this model will be useful to study chronic actinic dermatitis.

L20 ANSWER 21 OF 45 WPIDS (C) 2003 THOMSON DERWENT  
ACCESSION NUMBER: 1995-006691 [01] WPIDS  
CROSS REFERENCE: 1995-006366 [01]; 1997-558202 [51]  
DOC. NO. CPI: C1995-002344  
TITLE: Polynucleotide(s) determining **mycobacterial** resistance to isoniazid - useful in diagnosis, **treatment** and **prevention** of **mycobacterial** infection, e.g. tuberculosis..  
DERWENT CLASS: B04 D16  
INVENTOR(S): BANERJEE, A; COLLINS, D; DE LISLE, G W; JACOBS, W R; WILSON, T M  
PATENT ASSIGNEE(S): (AGRE-N) AGRESEARCH; (BANE-I) BANERJEE A; (COLL-I) COLLINS D; (JACO-I) JACOBS W R; (YESH) UNIV YESHIVA EINSTEIN COLLEGE; (WILS-I) WILSON T M  
COUNTRY COUNT: 47  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
-----					
WO 9426765	A1	19941124	(199501)*	EN	
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE					
W: AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB HU JP KP KR KZ					
LK LU MD MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US UZ VN					
AU 9469496	A	19941212	(199521)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
-----			
WO 9426765	A1	WO 1994-US5398	19940513
AU 9469496	A	AU 1994-69496	19940513

FILING DETAILS:

PATENT NO	KIND	PATENT NO
-----		
AU 9469496	A Based on	WO 9426765

PRIORITY APPLN. INFO: US 1994-221742 19940331; NZ 1993-247620  
19930513; US 1993-62409 19930514

AN 1995-006691 [01] WPIDS  
CR 1995-006366 [01]; 1997-558202 [51]  
AB WO 9426765 A UPAB: 19971222  
A new polynucleotide encodes the enzyme which is the target of

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action for isoniazid. Also claimed are: (1) an oligonucleotide probe capable of identifying the nucleic acids encoding isoniazid resistance of a tuberculosis **mycobacterium**; (2) prodn. of a tuberculosis-specific purified **mycolic** acid by adding the **M. tuberculosis** InhA enzyme or the **M. bovis** pS5 enzyme to the chemical reaction which produces **mycolic** acid; (3) an antibody (Ab) immunoreactive with polynucleotides encoding the enzyme which is the target of action for isoniazid; etc.

USE - The polynucleotides, and the enzymes they encode can be used (i) to prepare anti-DNA or anti-mRNA oligonucleotides useful for inhibiting enzyme expression, thereby eliminating isoniazid resistance so as to **treat** and **prevent** tuberculosis infection; (ii) to produce probes capable of identifying the nucleic acids in tuberculosis **mycobacteria** which encode isoniazid resistance, useful in **treatment** and **prevention** of tuberculosis (diagnostic kits contg. the probes are provided); (iii) to assess the susceptibility of various **mycobacterial** strains to the antibiotic isoniazid (by detection of mutation in the inhA or pS5 operon by PCR amplification); (iv) to determine whether various antibiotic drugs are effective against the **M. tuberculosis** complex (by measurement of **mycolic** acid biosynthesis activity) (all claimed). The polynucleotides may be used to produce or improve tuberculosis vaccines. Mutated genes of **M. tuberculosis** and **M. bovis** can be added to BCG or tuberculosis vaccines to provide attenuated mutant tuberculosis vaccines. These vaccines can be used to **treat** and **prevent** a wide variety of diseases, including tuberculosis, AIDS, leprosy, polio, malaria and tetanus (claimed). **M. tuberculosis** may be **treated** by **admin.** of a cpd. which blocks the **mycolic** acid biosynthesis activity of the enzyme encoded by the mabA gene (claimed). The antibodies may also be used to **treat** tuberculosis (claimed).  
Dwg.0/13

L20 ANSWER 22 OF 45 WPIDS (C) 2003 THOMSON DERWENT  
ACCESSION NUMBER: 1995-006366 [01] WPIDS  
CROSS REFERENCE: 1995-006691 [01]; 1997-558202 [51]  
DOC. NO. CPI: C1995-002164  
TITLE: Gene target for isonicotinic acid hydrazide - used to develop prods for diagnosis, **treatment**, **prevention** and studies involving **mycobacterial** infections.  
DERWENT CLASS: B04 D16  
INVENTOR(S): BANERJEE, A; COLLINS, D M; DE LISLE, G W; JACOBS, W R; WILSON, T M; COLLINS, D  
PATENT ASSIGNEE(S): (AGRE-N) AGRESEARCH NEW ZEALAND PASTORAL AGRIC; (YESH) UNIV YESHIVA EINSTEIN COLLEGE; (BANE-I) BANERJEE A; (COLL-I) COLLINS D M; (DLIS-I) DE LISLE G W; (JACO-I) JACOBS W R; (WILS-I) WILSON T M; (AGRE-N) AGRESEARCH; (COLL-I) COLLINS D; (AGRE-N) AGRESEARCH NZ PASTORAL AGRIC RES INST LTD; (YESH) UNIV YESHIVA  
COUNTRY COUNT: 54  
PATENT INFORMATION:

Searcher : Shears 308-4994

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PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9426312	A1	19941124	(199501)*	EN	76
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE					
W: AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KG KP					
KR KZ LK LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK					
TJ TT UA US UZ VN					
AU 9469121	A	19941212	(199521)		
AU 9469496	A	19941212	(199521)		
EP 707496	A1	19960424	(199621)	EN	
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					
JP 09501823	W	19970225	(199718)		71
AU 690121	B	19980423	(199828)		
EP 707496	A4	19971112	(199840)		

# APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9426312	A1	WO 1994-US5344	19940512
AU 9469121	A	AU 1994-69121	19940512
AU 9469496	A	AU 1994-69496	19940513
EP 707496	A1	EP 1994-917378	19940512
		WO 1994-US5344	19940512
JP 09501823	W	JP 1994-525723	19940512
		WO 1994-US5344	19940512
AU 690121	B	AU 1994-69121	19940512
EP 707496	A4	EP 1994-917378	19940512

# FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9469121	A Based on	WO 9426312
AU 9469496	A Based on	WO 9426765
EP 707496	A1 Based on	WO 9426312
JP 09501823	W Based on	WO 9426312
AU 690121	B Previous Publ.	AU 9469121
	Based on	WO 9426312

PRIORITY APPLN. INFO: US 1993-62409 19930514; NZ 1993-247620  
19930513; US 1994-221742 19940331

AN 1995-006366 [01] WPIDS  
CR 1995-006691 [01]; 1997-558202 [51]  
AB WO 9426312 A UPAB: 19981021

(A) An isolated wild-type gene (inhA) is claimed which encodes a polypeptide (InhA) which is the target of action for isoniazid (isonicotinic acid hydrazide (INH). Also claimed are: (B) an isolated mutant gene that encodes InhA, where the mutant gene is associated with INH-resistance; (C) an isolated polynucleotide encoding an InhA polypeptide, fragment or variant; (D) a host cell comprising a polynucleotide as in (A), (B) or (C); (E) a method of **treating** an individual for an infection caused by a member of the **mycobacterial** (MB) complex comprising **administering** a compsn. comprising a polynucleotide capable of inhibiting mRNA activity from an inhA operon of the infecting species and a suitable excipient; (F) a method of assessing susceptibility of a strain of **mycobacteria** in a biological

sample to INH, comprising (a) providing the **mycobacterial** DNA from the biological sample, (b) amplifying a region of the inhA operon, (c) determining whether a mutation exists within the inhA operon, the presence of a mutation indicating that the MB strain is resistant to INH; (G) a method of determining whether a drug is effective against MB infection, comprising (a) providing isolated InhA, (b) providing a candidate drug, (c) mixing InhA with substrates for **mycolic** acid (MA) biosynthesis in the presence or absence of the candidate drug and (d) measuring the inhibition of biosynthesis of MA caused by the presence of the drug, if any; (H) a method of producing a tuberculosis (TB)-specific MA comprising adding purified InhA to substrates required for the biosynthesis of MA; (I) a method for producing a cpd. that inhibits InhA activity comprising (a) providing purified InhA, (b) determining the molecular structure of the InhA, (c) creating a cpd. with a similar molecular structure to INH and (d) determining that the cpd. inhibits the biochemical activity of InhA; (J) an isolated InhA polypeptide, fragment or variant; (K) a recombinant MB vaccine comprising attenuated mutants selected from **BCG, M -tuberculosis** and **M.bovis**, where the mutants are host cells contg. a mutated inhA gene.

USE - The prods and methods can be used in the diagnosis, **treatment, prevention** and studies involving MB infections. The vaccines can be used to **treat** and **prevent** a wide variety of **diseases** including TB, AIDS, leprosy, polio, malaria and tetanus.  
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L20 ANSWER 23 OF 45 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 94367423 EMBASE

DOCUMENT NUMBER: 1994367423

TITLE: Drug-resistant tuberculosis in adults: Implications for the health care worker.

AUTHOR: Dunlap N.E.; Kimerling M.E.

CORPORATE SOURCE: 246 OHB UAB Hospitals, Birmingham, AL 35233-6505, United States

SOURCE: Infectious Agents and Disease, (1994) 3/5 (245-255).

ISSN: 1056-2044 CODEN: IADIEV

COUNTRY: United States

DOCUMENT TYPE: Journal; (Short Survey)

FILE SEGMENT: 004 Microbiology  
017 Public Health, Social Medicine and Epidemiology  
035 Occupational Health and Industrial Medicine  
036 Health Policy, Economics and Management  
037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

AB In recent years, several outbreaks of drug-resistant tuberculosis have occurred in U.S. hospitals. In response to this recognized risk of tuberculosis exposure in health care facilities, the Centers for **Disease** Control and the Occupational Safety and Health **Administration** have issued guidelines or policy procedures for minimizing risks of tuberculosis transmission within these facilities. Some of the recommendations outlined in these governmental documents have been controversial. In this review the guidelines/policies and the debate surrounding them are discussed as they affect the health care worker who cares for adult patients with

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tuberculosis.

L20 ANSWER 24 OF 45 MEDLINE  
ACCESSION NUMBER: 94178803 MEDLINE  
DOCUMENT NUMBER: 94178803 PubMed ID: 8132212  
TITLE: A longitudinal study of per cent agalactosyl IgG in tuberculosis patients receiving chemotherapy, with or without immunotherapy.  
AUTHOR: Rook G A; Onyebujoh P; Wilkins E; Ly H M; al Attiyah R; Bahr G; Corrah T; Hernandez H; Stanford J L  
CORPORATE SOURCE: Department of Medical Microbiology, UCL Medical School, London, U.K.  
SOURCE: IMMUNOLOGY, (1994 Jan) 81 (1) 149-54.  
Journal code: 0374672. ISSN: 0019-2805.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199404  
ENTRY DATE: Entered STN: 19940428  
Last Updated on STN: 19970203  
Entered Medline: 19940418

AB An increased percentage of circulating IgG molecules that lack galactose from the oligosaccharides on the CH2 domain correlates with **disease** severity in tuberculosis, rheumatoid **arthritis** and Crohn's **disease**. We have recently observed that a single injection of 10(9) autoclaved **Mycobacterium vaccae** given to tuberculosis patients 7 days after the initiation of chemotherapy causes accelerated clinical improvement, and clearance of bacilli from the sputum. We now show that this immunotherapy also causes rapid loss of agalactosyl IgG, detectable within 14-21 days, whereas chemotherapy alone causes agalactosyl IgG to rise further for up to 2 months. There is simultaneous inhibition of the antibody response to **lipoarabinomannan**, and transient enhancement of the tuberculin skin-test response. These findings are compatible with a shift from antibody production towards increased cell-mediated immunity. The ideal **treatment** for tuberculosis would supplement a truncated course of chemotherapy with an immunotherapeutic preparation able to down-regulate the Koch phenomenon and replace it with an efficiently bactericidal mechanism. We tentatively postulate that a fall in per cent agalactosyl IgG [%Gal(0)] in tuberculosis patients may be a marker of such a change.

L20 ANSWER 25 OF 45 CANCERLIT  
ACCESSION NUMBER: 94697593 CANCERLIT  
DOCUMENT NUMBER: 94697593  
TITLE: Phase I/II trial of anti-idiotypic antibody (IMe1PG2)+ temurtide (T) in metastatic melanoma (Meeting abstract).  
AUTHOR: Quan W D Jr; Dean G E; Stevenson L; Merritt J A; Mitchell M S  
CORPORATE SOURCE: Kenneth Norris Jr Comprehensive Cancer Center, Los Angeles, CA 90033.  
SOURCE: Antibody Immunoconjugates Radiopharmaceuticals, (1993) 6 (1) 74.  
ISSN: 0892-7049.

Searcher : Shears 308-4994

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DOCUMENT TYPE: (CLINICAL TRIAL, PHASE I)  
(CLINICAL TRIAL, PHASE II)  
LANGUAGE: English  
FILE SEGMENT: Institute for Cell and Developmental Biology  
ENTRY MONTH: 199405  
ENTRY DATE: Entered STN: 19941107  
Last Updated on STN: 19941107

AB IMelPG2 is a murine monoclonal anti-idiotypic antibody which resembles the epitope of the high mol wt melanoma-associated antigen. T is an analog of muramyl dipeptide, the adjuvant principle of **mycobacteria**. We have **treated** 26 patients with a vaccine of IMelPG2 + T. One week after receiving an im test dose of T, patients received IMelPG2 2 mg with T 100 ug (6 patients) or T 250 ug (20 patients) im every 2 wk x 4 then every 8 wk. Patient characteristics: 14 males/12 females; median age 60 (range 28-85 with 11 patients over age 70); prior **therapy**, immunotherapy (10), chemotherapy (6), radiation (6), hormonal (3), limb perfusion (3). Most frequent sites of **disease**: lung (14), lymph nodes (12), sc (12), liver (6). Toxicity included low grade fever, Gr I or Gr II (requiring NSAID) myalgias and arthralgias in all patients. Two patients had Gr III arthralgias requiring T reduction to 100 ug. One patient with prior unilateral adrenalectomy and on ACE inhibitor for hypertension experienced hyperkalemia. All are evaluable for response. One partial response in multiple liver lesions continues at 7+ mo. Two minor responses in skin and axillary mass (1 and 3 mo) have been seen. Three patients continue with stable **disease**: liver, sc, lymph nodes (5 mo); lung and lymph nodes (4 mo); liver and sc (4 mo). Of these, 1 minor response and 1 stable **disease** have occurred on the lower T dose. IMelPG2 + T (at recommended dose of 250 ug) can be **administered** safely and has activity in metastatic melanoma.

L20 ANSWER 26 OF 45 MEDLINE DUPLICATE 7  
ACCESSION NUMBER: 93076877 MEDLINE  
DOCUMENT NUMBER: 93076877 PubMed ID: 1446719  
TITLE: Pharmacological aspects of **arthritis**  
induced by a muramyl dipeptide analogue in rats.  
AUTHOR: Sugawara T; Kato M; Furuhashi K; Takada S; Takayama S  
CORPORATE SOURCE: Drug Safety Research Center, Daiichi Pharmaceutical  
Co., Ltd., Tokyo, Japan.  
SOURCE: EUROPEAN JOURNAL OF PHARMACOLOGY, (1992 Sep 1) 228  
(2-3) 147-53.  
Journal code: 1254354. ISSN: 0014-2999.  
PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199212  
ENTRY DATE: Entered STN: 19930129  
Last Updated on STN: 19930129  
Entered Medline: 19921224

AB Fourteen consecutive daily subcutaneous injections of 4 mg/kg of the muramyl dipeptide analogue **MDP-Lys(L18)** into rats caused **arthritis** characterized by swelling of the tarsal joint, increases in lymphocytes and monocytes in the peripheral blood, and elevated serum immunoglobulin G (IgG). The present study was performed to evaluate the effects of indomethacin, phenylbutazone, dexamethasone, D-penicillamine, aurothioglucose, cyclophosphamide



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and cyclosporin A on this **arthritis**.

**Administration** of indomethacin, phenylbutazone or dexamethasone inhibited the development of the tarsal joint swelling, suggesting that prostaglandins may be involved in the pathogenesis of the **arthritis**. Cyclophosphamide reduced the **arthritis**, together with decreases in the lymphocyte count and the serum IgG level. Cyclosporin A worsened the **arthritis** in a dose-dependent manner and increased the neutrophil count without raising the serum IgG level, but inhibited the induction of adjuvant **arthritis** in rats with **Mycobacterium** bacilli. MDP-Lys(L18) may therefore induce **arthritis** differing in mechanism from adjuvant **arthritis**.

L20 ANSWER 27 OF 45 WPIDS (C) 2003 THOMSON DERWENT  
ACCESSION NUMBER: 1991-051313 [07] WPIDS  
CROSS REFERENCE: 1988-235047 [33]; 1991-006975 [01]; 1992-032700  
[04]; 1992-208237 [25]  
DOC. NO. CPI: C1991-021811  
TITLE: New 5'-di phospho hexose-nucleoside derivs. - with  
antiviral, antibacterial, antifungal,  
antiinflammatory and anticancer activity, esp. for  
**treating** HIV and infections concurrently.  
DERWENT CLASS: B02 B03 C01  
INVENTOR(S): CHUNG, C K; SCHINAZI, R F; SOMMADOSSI, J; CHU, C K;  
SOMMADOSSI, J P  
PATENT ASSIGNEE(S): (UYAL-N) UNIV ALABAMA; (UYGE-N) UNIV GEORGIA RES  
FOUND INC; (UABR-N) UAB RES FOUND  
COUNTRY COUNT: 15  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9100867	A	19910124	(199107)*		
	RW:	AT BE CH DE DK ES FR GB IT LU NL SE			
	W:	CA JP			
US 5159067	A	19921027	(199246)		13

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5159067	A	CIP of	US 1987-7473 19870128
		CIP of	US 1987-104438 19871002
			US 1989-377617 19890710

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 5159067	A	CIP of
		US 4916122

PRIORITY APPLN. INFO: US 1989-377617 19890710; US 1987-7473  
19870128; US 1987-104438 19871002

AN 1991-051313 [07] WPIDS  
CR 1988-235047 [33]; 1991-006975 [01]; 1992-032700 [04]; 1992-208237  
[25]  
AB WO 9100867 A UPAB: 19970926

Searcher : Shears 308-4994

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Nucleosides of formula (I) are new. In (I), A, B and C = H, halogen or azido; D = H, halogen, azido or OH; A and B or C and D can be replaced with a double bond; R = aldohexose, aldohexosamine or N-acetyl aldohexosamine; R1 and R2 = H, 1-10C alkyl; W = O, S; X = O, S or CH2; Y = purine, pyrimidine base; and Z = C, S or O, when Z = S or O, A and C are not present.

Several specific gps. of cpds. are claimed e.g. 5'-diphosphohexose, 5'-diphosphohexosamine or N-acetyl diphosphohexosamine derivatives of 3'-fluoro-3'-deoxy-thymidine, 3'-fluoro-2', 3'-dideoxy-5-methylcytidine etc.. Dose is 1-60 mg/kg body wt./day to produce a serum concn. 0.2-40 micron of active ingredient. **Administered** as single or divided daily dose.

(I) must be **administered** in a way that protects them until they reach the target cell pref. in a liposomal suspension either intraperitoneally, subcutaneously or intravenously.

USE/ADVANTAGE - (I) has antiviral, esp. anti HIV activity, anti-bacterial activity, partic. to opportunistic infections caused by M avian intracellulare, **M tuberculosis**, Legionella, Pneumocystis carinii, Salmonella, Shigella, anti-fungal and anti-inflammatory action. They are claimed cancer cpds.. Anti-bacterial activity is possible by the deriv. interfering with the biosynthesis of oligosaccharides, polysaccharides, glycolipids or glycoproteins or interfere once with maintenance of the bacterial cell wall through the inhibition of **peptidoglycan** biosynthesis. @ (87pp Dwg.No.0/11)@

ABEQ US 5159067 A UPAB: 19930928

5'-Diphosphohexose cpds. of formula (I) are new. In the formula A, B and C are H, halo or N3; D is H, halo, N3 or OH; or ABC and D can be replaced by a double bond; R is an aldohexose, aldohexosamine or N-acetylaldohexosamine; R1 and R2 are H or HOC alkyl; W is O or S; X is O, S or CH2; Y is purine or pyrimidine; and Z is, C S or O; provided that when Z is S or O, A and C are absent several cpds. are specifically claimed e.g. 5'-diphosphohexose.

USE/ADVANTAGE - The cpds. have enhanced activity or increased intracellular absorption over the parent nucleosides. They **prevent** or **treat** viral and other **diseases** esp. AIDS, ARC etc. **Admin** is oral, by injection or by other means.

0/0

ABEQ US 5190926 A UPAB: 19930928

Inhibition of HIV comprises **administering** a compsn. contg. a 3'-azido-2',3'-dideoxypyrimidine of formula (I) or its acid addn. salt and a carrier where, R1 = 1-4C acyl, sulphate or NH2. R2 = O and R3 = N.

Pref. the amt. of (I) is sufficient to produce a human serum concn. of 0.2-40, esp. 1-10  $\mu$ M.

ADVANTAGE - (I) has low toxicity of uninfected cells.

0/0

L20 ANSWER 28 OF 45 JICST-EPlus COPYRIGHT 2003 JST

ACCESSION NUMBER: 920114841 JICST-EPlus

TITLE: **Therapeutic** efficacy of kanamycin and clofazimine combined with muramyl dipeptide against **Mycobacterium** intracellulare infection induced in mice.

AUTHOR: TOMIOKA HARUAKI; SATO KATSUMASA; SAITO HAJIME

CORPORATE SOURCE: Shimane Medical Univ.

SOURCE: Kekaku, (1991) vol. 66, no. 12, pp. 811-817. Journal

09/308192

Code: Z0657A (Tb1. 7, Ref. 17)  
ISSN: 0022-9776

PUB. COUNTRY: Japan  
DOCUMENT TYPE: Journal; Article  
LANGUAGE: Japanese  
STATUS: New

AB **Therapeutic** efficacy of kanamycin(KM) and clofazimine(CFZ) combined with N2-.cents. (N-acetyl-muramoyl)-L-alanyl-D-isoglutaminyl!-N6-stearoyl-L-lysine, **MDP-Lys** (L18), against **Mycobacterium** intracellulare infection induced in mice was studied, based on suppression of incidence of gross lung lesions and bacterial growth at the sites of infection (lungs and spleen), and the following results were obtained. Firstly, KM (0.5mg) was given sc to mice, daily six times per week in combination (or not) with sc injections of **MDP-Lys**(18) (0.1mg) either 1, 3 or 5 times weekly. In this case, KM alone markedly suppressed the incidence of pulmonary gross lesions and the growth of organisms in the lungs and spleen (2-2.5log-decrease in CFU per organ at week 8) in infected mice. **MDP-Lys**(18) alone also exhibited similar effect but the efficacy was much lower than that of KM. No synergism was observed for combined use of KM with **MDP-Lys**(18) in any protocols tested. Secondly, CFZ (0.5mg) was given to mice by gavage, daily six times per week in combination with **Lys**(18) (0.1mg), injections of **MDP-Lys**(18) (0.1mg), either 1, 3 or 5 times weekly. In this case, CFZ alone decreased the incidence of gross pulmonary lesions in infected mice and the weaker suppressive effect was noted for **MDP-Lys**(18) alone. (abridged author abst.)

L20 ANSWER 29 OF 45 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 91327030 EMBASE

DOCUMENT NUMBER: 1991327030

TITLE: Pulmonary **disease** caused by **Mycobacterium** malmoense. Comments on the possible origin of infection and methods for laboratory diagnosis.

AUTHOR: Portaels F.; Denef M.; Larsson L.

CORPORATE SOURCE: Department of Microbiology, Institute of Tropical Medicine, Nationalestraat 155,B-2000 Antwerp, Belgium

SOURCE: Tubercle, (1991) 72/3 (218-222).  
ISSN: 0041-3879 CODEN: TUBEAS

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 004 Microbiology  
006 Internal Medicine  
015 Chest Diseases, Thoracic Surgery and Tuberculosis  
016 Cancer  
029 Clinical Biochemistry  
037 Drug Literature Index  
038 Adverse Reactions Titles

LANGUAGE: English

SUMMARY LANGUAGE: English

AB **Mycobacterium** malmoense was isolated from sputum and gastric lavage from a 68-year-old man with gastric adenocarcinoma. The patient meets the criteria for diagnosis of pulmonary **mycobacteriosis**. The cultural, physiological and biochemical properties of the isolates were compared with other slowly growing

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**mycobacterial** species. Fatty and **mycolic** acid analyses revealed the presence of 2-methyleicosanoic and 2,4,6-trimethyltetracosanoic acids and .alpha.-, .alpha.'- and ketomycolates, all regarded as typical for *M. malmoeense*. The possible origin of *M. malmoeense* infections and methods for laboratory diagnosis are discussed. This is the first case of documented infection due to this organism in Belgium.

L20 ANSWER 30 OF 45 JICST-EPlus COPYRIGHT 2003 JST

ACCESSION NUMBER: 910820382 JICST-EPlus

TITLE: Extraction and Purification of **M. bovis BCG** Lipopolysaccharides and Endotoxin-like Biological Response Modifying Activity.

AUTHOR: NAGAO AKIRA

CORPORATE SOURCE: Hyogo College of Medicine

SOURCE: Hyogo Ika Daigaku Igakkai Zasshi (Acta Medica Hyogoensia), (1990) vol. 15, no. 1, pp. 25-44.  
Journal Code: S0690B (Fig. 6, Tbl. 13, Ref. 41)  
ISSN: 0385-7638

PUB. COUNTRY: Japan

DOCUMENT TYPE: Journal; Article

LANGUAGE: Japanese

STATUS: New

AB 'Delipidated' cells of **M. bovis BCG**

were extracted with 90% phenol/chloroform/petroleum ether (2:5:8, by volume). The water phase extracts were separated by centrifugal partition chromatography (CPC) to obtain essentially homogeneous amphiphile possessing endotoxin-like bioactivity (BAG/LPS). The average yield of BAG/LPS was about 0.4% of the 'delipidated' **BCG** cells. BAG/LPS was found to be comprised mainly of sugars (mannose, inositol, glycerol, glucose and arabinose as major components) and fatty acids (mainly palmitic and tuberculostearic) at a weight ratio of 1.2:1.0, with 1.3% phosphorus and trace amounts of amino acids and amino sugars. No chemical markers of hitherto known bacterial biological responses modifiers (BRMs) were detected. BAG/LPS exhibited a wide range of potent BRM activity: Limulus activity, induction of TNF and IFN .ALPHA.+ .BETA. and .GAMMA. in properly primed mice, and induction of IL-1 and tumoricidal activity of cultured murine peritoneal macrophages. The intravenous **administration** of BAG/LPS led to extensive hemorrhagic necrosis and the complete cure of Meth A fibrosarcoma in BALB/c mice pretreated with **MDP**. Any side effects were slight and transient. BAG/LPS was highly lethal in D-galactosamine-sensitized mice, but much less pyrogenic than the conventional LPS. The induction of TNF and IFNs and death of D-galactosamine-sensitized mice by BAG/LPS, in contrast to the conventional LPS, were scarcely affected by prior incubation with polymyxin B. Nevertheless, C3H/HeJ mice that hardly respond to conventional LPS were negligibly responsive to the induction of TNF and IFNs by BAG/LPS. Reciprocal cross tolerance was found in lethality between BAG/LPS and *E. coli*/LPS in D-galactosamine-**treated** mice. (author abst.)

L20 ANSWER 31 OF 45 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 89108603 EMBASE

DOCUMENT NUMBER: 1989108603

TITLE: Clinical effects induced by intratumoral **administration** of anti-cancerous drugs in

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skin malignant tumors.  
AUTHOR: Ishihara K.  
CORPORATE SOURCE: Department of Dermatology, National Cancer Center,  
Tokyo 104, Japan  
SOURCE: Japanese Journal of Cancer and Chemotherapy, (1989)  
16/2 (173-179).  
ISSN: 0385-0684 CODEN: GTKRDX  
COUNTRY: Japan  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 013 Dermatology and Venereology  
016 Cancer  
037 Drug Literature Index  
038 Adverse Reactions Titles  
LANGUAGE: Japanese  
SUMMARY LANGUAGE: English

L20 ANSWER 32 OF 45 MEDLINE DUPLICATE 8  
ACCESSION NUMBER: 87283101 MEDLINE  
DOCUMENT NUMBER: 87283101 PubMed ID: 3612438  
TITLE: Muramyl tripeptide: an effective immunotherapy in the  
surgical setting for pediatric abdominal neoplasms.  
AUTHOR: Jarowenko D G; Sigler S C; Pellis N R  
SOURCE: JOURNAL OF PEDIATRIC SURGERY, (1987 Jun) 22 (6)  
497-500.  
Journal code: 0052631. ISSN: 0022-3468.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198708  
ENTRY DATE: Entered STN: 19900305  
Last Updated on STN: 19900305  
Entered Medline: 19870828

AB A potential complication of intraperitoneal neoplasms is the occurrence of peritoneal metastases. This experiment hypothesizes that resident peritoneal macrophages, activated by muramyl tripeptide (MTP-PE), will destroy peritoneal tumor. MTP-PE is a lipophilic derivative of the **mycobacteria** cell wall component responsible for induction of cellular immunity and activation of macrophages to a tumoricidal state. A transplantable murine fibrosarcoma, MCA-F was utilized. Murine hosts were challenged intraperitoneally with  $5 \times 10^3$  MCA-F cells. **Treatment** with MTP-PE micelles or liposome-encapsulated MTP-PE was initiated 48 hours prechallenge and on the day of tumor challenge and continued at 72 hour intervals for the subsequent 21 days. Hosts were observed for survival. At 45 days after tumor challenge, all untreated control animals had succumbed to overwhelming neoplastic **disease**. In contrast, 30% of the mice **treated** with liposome-encapsulated MTP-PE (P less than .05) and 50% of the animals **treated** with MTP-PE micelles (P less than .001) remained alive at 60 days. Followed for 120 days, 20% of MTP-PE micelle **treated** mice are long-term survivors. These results suggest that control of intraperitoneal seedings may be achieved with MTP-PE when the tumor burden is small.

L20 ANSWER 33 OF 45 MEDLINE DUPLICATE 9  
ACCESSION NUMBER: 87208124 MEDLINE  
DOCUMENT NUMBER: 87208124 PubMed ID: 3577263

Searcher : Shears 308-4994

09/308192

TITLE: [Immunotherapy of cancer--status and perspectives].  
Immuntherapie des Krebses--Stand und Perspektive.  
AUTHOR: Mey U  
SOURCE: ZEITSCHRIFT FUR DIE GESAMTE INNERE MEDIZIN UND IHRE  
GRENZGEBIETE, (1987 Jan 1) 42 (1) 18-20.  
Journal code: 21730470R. ISSN: 0044-2542.  
PUB. COUNTRY: GERMANY, EAST: German Democratic Republic  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: German  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198706  
ENTRY DATE: Entered STN: 19900303  
Last Updated on STN: 19900303  
Entered Medline: 19870608

AB Already since more than 80 years in medicine a cancer control by means of immunological methods has been tried again and again. In the last decennium above all the possibilities of the immunostimulation and the immunopotentialization as **therapeutic** principle were investigated. But neither the influence on the macrophages and the NK-cells perhaps by **BCG**, **MDP**, interferons or similar things nor the application of a tumour vaccine, e.g. blasts stimulated with neuraminidase, nor the T-lymphocyte stimulation, e.g. by thymus factors or levamisole, nor the activation of the specific tumour defence possibly by interleukins or clonic killer-cells brought a decisive breaking forth. Only in some certain malignant **diseases**, such as in virus-induced leukaemias or non-Hodgkin lymphomas of the B-cell series, by means of interferon and monoclonal anti-idiotypic-antibodies, respectively, principal possibilities of an immunotherapy could be revealed. The question arises, whether the concept of an immunological tumour control underlying the previous **therapeutic** efforts really proves right or whether or not the recent knowledge about the principle of the oncogenes should give rise to a change of **therapeutic** thoughts.

L20 ANSWER 34 OF 45 MEDLINE DUPLICATE 10  
ACCESSION NUMBER: 86141752 MEDLINE  
DOCUMENT NUMBER: 86141752 PubMed ID: 3005400  
TITLE: Chronic infection due to **Mycobacterium**  
intracellulare in mice: association with macrophage  
release of prostaglandin E2 and reversal by injection  
of indomethacin, muramyl dipeptide, or  
interferon-gamma.  
AUTHOR: Edwards C K 3rd; Hedegaard H B; Zlotnik A;  
Gangadharam P R; Johnston R B Jr; Pabst M J  
CONTRACT NUMBER: AI 14148 (NIAID)  
AI 15049 (NIAID)  
DE 05494 (NIDCR)  
+  
SOURCE: JOURNAL OF IMMUNOLOGY, (1986 Mar 1) 136 (5) 1820-7.  
Journal code: 2985117R. ISSN: 0022-1767.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals  
ENTRY MONTH: 198604  
ENTRY DATE: Entered STN: 19900321  
Last Updated on STN: 20000303

Searcher : Shears 308-4994

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Entered Medline: 19860401

AB As a model for the study of human atypical **mycobacterial disease**, we explored the basis for the prolonged **mycobacteriosis** in mice infected with **Mycobacterium intracellulare**. Two weeks after i.v. injection of **mycobacteria**, peritoneal macrophages were found to be activated, as indicated by their capacity to produce large amounts of superoxide anion (O<sub>2</sub><sup>-</sup>) in response to phorbol myristate acetate (PMA) or viable **M. intracellulare**. However, 4 wk after infection, despite the continued presence of large numbers of **mycobacteria** in the spleen, macrophages from infected animals produced low amounts of O<sub>2</sub><sup>-</sup>. Unfractionated spleen cells from mice infected 4 wk earlier produced increased amounts of interleukin 2 and interferon (IFN) when stimulated with the mitogen concanavalin A, but less of these lymphokines than unstimulated cells when exposed to antigens derived from **M. intracellulare**, suggesting production of an inhibitory factor. Spleen cells from infected mice were not stimulated to incorporate [3H]thymidine by exposure to **mycobacterial** antigens; but this unresponsiveness could be reversed by addition of indomethacin to the cultures. Additional investigation showed that macrophages from infected animals produced large amounts of prostaglandin E<sub>2</sub> (PGE<sub>2</sub>) when stimulated by **mycobacterial** antigens. In vitro, such concentrations of PGE<sub>2</sub> inhibited uptake of [3H]thymidine by stimulated spleen lymphocytes from infected animals. Thus, it seemed likely that in infected animals, macrophage-derived PG suppressed production of IFN-gamma by lymphocytes, which in turn **prevented** activation of the macrophages to full microbicidal activity. To test this hypothesis, we **administered** either indomethacin, IFN-gamma, or muramyl dipeptide to infected mice. Mice **treated** with each of these agents showed decreased spleen and lung weights, and decreased numbers of viable **mycobacteria** in these organs. These results support the concept that interaction between the host and **M. intracellulare** is modulated profoundly by PG and suggest that **administration** of agents that directly promote macrophage activation can enhance resistance to infection by this organism.

L20 ANSWER 35 OF 45 MEDLINE DUPLICATE 11  
ACCESSION NUMBER: 85246102 MEDLINE  
DOCUMENT NUMBER: 85246102 PubMed ID: 2409659  
TITLE: Approaches to cancer **therapy** using  
biological response modifiers.  
AUTHOR: MacEwen E G  
SOURCE: VETERINARY CLINICS OF NORTH AMERICA. SMALL ANIMAL  
PRACTICE, (1985 May) 15 (3) 667-88. Ref: 152  
Journal code: 7809942. ISSN: 0195-5616.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198508  
ENTRY DATE: Entered STN: 19900320  
Last Updated on STN: 19900320  
Entered Medline: 19850822

L20 ANSWER 36 OF 45 MEDLINE

Searcher : Shears 308-4994

09/308192

ACCESSION NUMBER: 86005732 MEDLINE  
DOCUMENT NUMBER: 86005732 PubMed ID: 4043481  
TITLE: Immunity to *Aeromonas salmonicida* in coho salmon  
(*Oncorhynchus kisutch*) induced by modified Freund's  
complete adjuvant: its non-specific nature and the  
probable role of macrophages in the phenomenon.  
AUTHOR: Olivier G; Evelyn T P; Lallier R  
SOURCE: DEVELOPMENTAL AND COMPARATIVE IMMUNOLOGY, (1985  
Summer) 9 (3) 419-32.  
Journal code: 7708205. ISSN: 0145-305X.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198511  
ENTRY DATE: Entered STN: 19900321  
Last Updated on STN: 19900321  
Entered Medline: 19851120

AB Juvenile coho salmon (*Oncorhynchus kisutch*), vaccinated with one  
intraperitoneal injection of formalin-killed virulent *Aeromonas*  
*salmonicida* cells suspended in saline, showed increased protection  
against approximately one LD<sub>60</sub> of homologous challenge  
**administered** at 30 days post-vaccination. Under similar  
conditions, coho vaccinated with a modified complete Freund's  
adjuvant (MFCA) alone were also equally protected. When measured  
against a more severe *A. salmonicida* challenge of approximately one  
LD<sub>95</sub>, the strength of the MFCA-induced protection was found to  
exceed that produced by the homologous bacterin **administered**  
in saline or incomplete adjuvant, and the protection was still  
evident at 90 days post-treatment. Other more precise  
measurements indicated the LD<sub>50</sub> for MFCA-treated coho to  
be up to 450 times that for saline-treated coho. Two other  
tested adjuvants, levamisole and MDP (N-acetyl-muramyl-L-  
alanyl-D-isoglutamine), **administered** in a modified  
Freund's incomplete adjuvant, also enhanced anti-*A. salmonicida*  
immunity but to a lesser degree. The active factor in MFCA was a  
killed *Mycobacterium butyricum* preparation, and the  
anti-*A. salmonicida* immunity it induced was non-specific because the  
immunity extended to two other serologically distinct fish pathogens  
tested: *A. hydrophila* (LD<sub>50</sub> increase of 5.3-fold) and *Vibrio ordalii*  
(LD<sub>50</sub> increase of 560-fold). Macrophages are believed to account for  
the *M. butyricum*-induced anti-*A. salmonicida* immunity because the  
immunity was a) non-specific, b) very rapid in onset (it was  
measurable by 4 days), and c) influenced by particulate  
preparations, known to affect macrophage function and immunity in  
mammals. The possible benefits of adjuvant-induced non-specific  
immunity in cultured fish are discussed.

L20 ANSWER 37 OF 45 MEDLINE  
ACCESSION NUMBER: 84086952 MEDLINE  
DOCUMENT NUMBER: 84086952 PubMed ID: 6654538  
TITLE: Effects of **mycobacterial** fractions and  
muramyl dipeptide on the resistance of mice to  
aerogenic influenza virus infection.  
AUTHOR: Masihi K N; Brehmer W; Lange W; Ribí E  
SOURCE: INTERNATIONAL JOURNAL OF IMMUNOPHARMACOLOGY, (1983) 5  
(5) 403-10.  
Journal code: 7904799. ISSN: 0192-0561.

Searcher : Shears 308-4994



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PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198402  
ENTRY DATE: Entered STN: 19900319  
Last Updated on STN: 19970203  
Entered Medline: 19840214

AB The nonspecific protective effect in mice of pre-exposure to **mycobacterial** components and muramyl dipeptide three weeks before aerosol infection with influenza virus A/PR/8/34 (H1N1) was studied. Muramyl dipeptide, when combined with trehalose dimycolate and emulsified in an oil-in-water emulsion, conferred complete protection comparable to specific immunization with a high dose of formalin inactivated A/PR/8/34 influenza viral vaccine. Animals pre-exposed to muramyl dipeptide plus trehalose dimycolate showed a marked reduction in lung virus titres, an earlier clearance of detectable infectious virus, and an earlier onset of antibody production in comparison to control mice. Resistance to infection was also observed with BCG-cell wall skeleton combined with trehalose dimycolate and trehalose dimycolate alone when given as oil-in-water preparations. The route of **administration** of nonspecific stimulants was crucial. Only intravenous but not intradermal inoculation produced significant protection.

L20 ANSWER 38 OF 45 MEDLINE DUPLICATE 12  
ACCESSION NUMBER: 84148831 MEDLINE  
DOCUMENT NUMBER: 84148831 PubMed ID: 6670292  
TITLE: The effect of endotoxin and endotoxin tolerance on inflammation induced by **mycobacterial** adjuvant.  
AUTHOR: Rosenbaum J T; Mandell R B  
CONTRACT NUMBER: AM-31076 (NIADDK)  
SOURCE: YALE JOURNAL OF BIOLOGY AND MEDICINE, (1983 Jul-Aug) 56 (4) 293-301.  
Journal code: 0417414. ISSN: 0044-0086.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198404  
ENTRY DATE: Entered STN: 19900319  
Last Updated on STN: 19970203  
Entered Medline: 19840411

AB **Peptidoglycan**, the substance in **mycobacteria** thought to be responsible for inducing adjuvant **arthritis**, and endotoxin (lipopolysaccharide or LPS) share many inflammatory properties. Since repeated **administration** of LPS produces tolerance, i.e., resistance to the toxic and inflammatory effects of LPS, we tested whether LPS and/or LPS tolerance might influence inflammation due to **mycobacterial** adjuvant. Male Sprague-Dawley rats were injected with Escherichia coli LPS or saline intraperitoneally and then challenged with 100 micrograms killed **Mycobacteria** butyricum (adjuvant) in the footpad. A single dose of 100 micrograms LPS three or 24 hours before adjuvant markedly, but transiently, reduced the local footpad swelling that begins within hours of the adjuvant injection and histologically resembles a sterile abscess. Animals that received multiple doses of

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LPS and were therefore tolerant or animals that received LPS 72 hours before adjuvant demonstrated adjuvant-induced footpad swelling nearly equal to controls. The anti-inflammatory effect of LPS was transient since footpad swelling in all groups was nearly comparable six days after the adjuvant injection and LPS failed to inhibit consistently the **arthritis** that develops two or more weeks after adjuvant injection. These studies establish that LPS can markedly inhibit the prodrome of adjuvant **arthritis** (footpad swelling due to *M. butyricum*), that inhibition of this prodrome does not **prevent** the subsequent development of **arthritis**, and that LPS tolerance diminishes this anti-inflammatory effect of LPS.

L20 ANSWER 39 OF 45 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 83149793 EMBASE

DOCUMENT NUMBER: 1983149793

TITLE: Biotransformation of drugs in rats **treated** with a synthetic muramyl dipeptide, N-acetylmuramyl-L-alanyl-D-isoglutamine (**MDP**).

AUTHOR: Zidek Z.; Kamenikova L.; Buchar E.; et al.

CORPORATE SOURCE: Inst. Pharmacol., Czech. Acad. Sci., 128 00 Prague 2, Czechoslovakia

SOURCE: International Journal of Immunopharmacology, (1983) 5/2 (151-155).

CODEN: IJIMDS

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal

FILE SEGMENT: 037 Drug Literature Index

030 Pharmacology

026 Immunology, Serology and Transplantation

LANGUAGE: English

AB Natural immunoadjuvant mixtures like **BCG** and **FCA** are known to produce gross alterations of drug-metabolizing systems in the rat. Since it has been shown that the smallest structure of various bacterial **peptidoglycans**, possessing adjuvant activity, is muramyl dipeptide, N-acetylmuramyl-L-alanyl-D-isoglutamine (**MDP**), the possibility has been tested whether this substance is involved in production of the observed metabolic changes. Synthetic compound was applied subcutaneously for the period of 21 days, and the in vitro activity of 7-ethoxycoumarin-O-de-ethylase, aminopyrine-N-demethylase, together with the microsomal content of cytochrome P-450 and b5, and the in vivo acetylation of sulphadimidine, were investigated. No effect of **MDP** on any of these tests was noted in both the Lewis arthritic strain and the **AVN disease-free** strain. It is suggested that **MDP** is metabolically inactive and that the defects in metabolism of drugs, following bacterial-adjuvant **treatment**, are likely to be due to some additional cell-wall components, other than **peptidoglycans**. Furthermore, our data support the view of no relationship between the development of metabolism changes and the established arthritic lesions in rats.

L20 ANSWER 40 OF 45 MEDLINE

DUPLICATE 13

ACCESSION NUMBER: 82119040 MEDLINE

DOCUMENT NUMBER: 82119040 PubMed ID: 6976939

TITLE: Arthritogenic activity of a synthetic immunoadjuvant, muramyl dipeptide.

Searcher : Shears 308-4994

09/308192

AUTHOR: Zidek Z; Masek K; Jiricka Z  
SOURCE: INFECTION AND IMMUNITY, (1982 Feb) 35 (2) 674-9.  
Journal code: 0246127. ISSN: 0019-9567.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198204  
ENTRY DATE: Entered STN: 19900317  
Last Updated on STN: 19900317  
Entered Medline: 19820412

AB A synthetic muramyl dipeptide, N-acetylmuramyl-L-alanyl-D-isoglutamine, dissolved in saline only and applied subcutaneously to rats of the Lewis inbred strain, produced **arthritis**, clinically manifest by hind feet paresis but without apparent paw swelling in most cases. Histologically, the **disease** was characterized by edema and hyperemia of connective tissues, joint synovias, and tendon sheaths, with massive accumulation of inflammatory cell infiltrates composed mainly of lymphoplasmacytes and partly of neutrophil leukocytes. Fibrin exudation and fibrinoid necrosis in connective tissues were observed in the most severe cases. Synovial layers of the talocrural joint, especially on their villi, exhibited marked swelling or cell desquamation of the inner zone. Clinical symptoms of the **disease** disappeared spontaneously within 5 days after cessation of the **treatment**; also, histological examinations showed that the effects were reversible. Our results prove that (i) muramyl dipeptide is the principal substance involved in the production of **arthritis**, (ii) there is no necessity for the presence of additional **mycobacterial** cell wall components, and (iii) the involvement of the oil moiety is not requisite for the production of **arthritis**.

L20 ANSWER 41 OF 45 MEDLINE DUPLICATE 14  
ACCESSION NUMBER: 81045735 MEDLINE  
DOCUMENT NUMBER: 81045735 PubMed ID: 7000685  
TITLE: Relationship of anti-tuberculous protection to lung granuloma produced by intravenous injection of synthetic 6-O-mycoloyl-N-acetylmuramyl-L-alanyl-D-isoglutamine with or without specific antigens.  
AUTHOR: Yamamoto K; Kakinuma M; Kato K; Okuyama H; Azuma I  
SOURCE: IMMUNOLOGY, (1980 Aug) 40 (4) 557-64.  
Journal code: 0374672. ISSN: 0019-2805.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198101  
ENTRY DATE: Entered STN: 19900316  
Last Updated on STN: 19900316  
Entered Medline: 19810116

AB Intravenous **administration** of 6-O-mycoloyl-N-acetylmuramyl-L-alanyl-D-isoglutamine (mycol-**MDP**) together with a specific antigen, PPD, in a water-in-oil emulsion was found to produce lung granuloma and to provide a low but significant grade of protection in mice against tuberculous infection within 4 weeks. However, these products, when given in an oil-in-water emulsion did not produce granuloma. Mycol-**MDP** alone produced comparable

held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts prior to December 26, 1996), unless otherwise indicated in the original publications.

FILE COVERS 1967 - 11 Dec 2000 VOL 133 ISS 25  
FILE LAST UPDATED: 10 Dec 2000 (20001210/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s insulin dependent diabetes mellitus

112593 INSULIN  
685178 DEPENDENT  
52280 DIABETES  
41381 MELLITUS  
L1 7857 INSULIN DEPENDENT DIABETES MELLITUS  
(INSULIN(W)DEPENDENT(W)DIABETES(W)MELLITUS)

=> s microbacterium and cell wall and l1

8 MYCROBACTERIUM  
1290743 CELL  
170090 WALL  
32183 CELL WALL  
(CELL(W)WALL)  
L2 0 MYCROBACTERIUM AND CELL WALL AND L1

=> s mycobacterium and cell wall and l1

16889 MYCOBACTERIUM  
1290743 CELL  
170090 WALL  
32183 CELL WALL  
(CELL(W)WALL)  
L3 2 MYCOBACTERIUM AND CELL WALL AND L1

=> d l3 1-2 bib ab

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2000 ACS

AN 1998:338147 CAPLUS

DN 129:27000

TI **Mycobacterium cell wall** compositions

IN Baxter, Alan George

PA Amrad Operations Pty. Ltd., Australia; Baxter, Alan George

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9820900	A1	19980522	WO 1997-AU770	19971113

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR,

KZ, LC, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ,  
PL, PT, RU, SD, SE, SG, SI, SK, SL, TJ, TR, TT, UA, UG,  
US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,  
GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,  
GN, ML, MR, NE, SN, TD, TG

AU 9749345 A1 19980603 AU 1997-49345 19971113  
EP 948350 A1 19991013 EP 1997-911956 19971113

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

PRAI AU 1996-3593 19961113  
WO 1997-AU770 19971113

AB The present invention relates generally to a method of immunomodulating therapy and pharmaceutical compns. useful for same. More particularly, the present invention provides a method of ameliorating the effects of autoimmune conditions. Even more particularly, the present invention contemplates a method for preventing, delaying onset of or otherwise ameliorating the effects of insulin-dependant diabetes mellitus (IDDM) by administering a **cell wall** subunit or a chem. or functional equiv. thereof from **Mycobacterium** or a related organism or other suitable biol. source. The present invention is further

directed to a pharmaceutical compn. useful in preventing, delaying onset of, curing, curing in assocn. with islet replacement or otherwise ameliorating the effects of autoimmune conditions such as IDDM or for enhancing an immune response against melanoma or other cancer comprising

a **cell wall** subunit or a chem. or functional equiv. thereof from **Mycobacterium** or a related organism or other suitable biol. source. The **cell wall** subunit is preferably mycolyl-arabinogalactan-peptidoglycan (MAPG) or a component thereof.

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2000 ACS

AN 1993:189837 CAPLUS

DN 118:189837

TI Complete Freund's adjuvant-induced T cells prevent the development and adoptive transfer of diabetes in nonobese diabetic mice

AU Qin, Hui Yu; Sadelain, Michel W. J.; Hitchon, Carol; Lauzon, Jana; Singh, Bhagirath

CS Dep. Immunol., Univ. Alberta, Edmonton, AB, T6G 2H7, Can.

SO J. Immunol. (1993), 150(5), 2072-80

CODEN: JOIMA3; ISSN: 0022-1767

DT Journal

LA English

AB **Insulin-dependent diabetes mellitus**

is an autoimmune disease that is characterized by the destruction of insulin-producing .beta. cells in the islet of Langerhans. It was recently reported that the induction of the disease in nonobese diabetic (NOD) mice can be prevented by a single injection of complete Freund's adjuvant (CFA). The cellular basis and the time course of the disease protection were explored. Since CFA contains a mycobacterial **cell wall** that has adjuvant property, the protective role was investigated of mycobacteria in young NOD mice. Mice injected with **Mycobacterium** tuberculosis or M. bovis (BCG vaccine) at 4 wk of age were also protected from diabetes. The complete protection from diabetes was only achieved by administration of CFA between 4 and 10 wk

of age. Draining lymph node cells or spleen cells from CFA-treated NOD mice transferred the protection. Adoptive transfer of spleen cells from CFA-treated mice with spleen cells from acutely diabetic mice delayed the induction of disease into irradiated recipient mice. CFA-treated old NOD mice were also resistant to passive transfer of disease by spleen cells from acutely diabetic mice. Depletion of the Thy 1.2+ cells or CD4+-bearing T cells abrogated the protection. However, disease can be

induced in the protected mice by cyclophosphamide treatment. Also, the thymocytes from NOD mice responded only weakly to antigen Con A. CFA treatment, however, restored the ability of these cells to respond to Con A. Thus, T cells induced after CFA treatment of NOD mice prevent both

the

induction and effector phases of the disease.

L14 ANSWER 6 OF 16 MEDLINE

AN 88200253 MEDLINE

DN 88200253

✓ TI A component of *Mycobacterium leprae* as immunomodulating agent for immune deficient cells of leprosy patients.

AU Robinson P; Mahadevan P R

CS Foundation for Medical Research, Bombay, India..

SO JOURNAL OF CLINICAL AND LABORATORY IMMUNOLOGY, (1987 Dec) 24 (4) 171-6.  
Journal code: J3K. ISSN: 0141-2760.

CY Italy

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 198808

AB The delipidified component of the insoluble portion which presumably is the cell wall of *Mycobacterium leprae* (DCW) was able to induce lymphocyte proliferation in the leucocyte culture from the peripheral blood of lepromatous leprosy patients. Normally these cells

show no lymphocyte proliferation in response to *M. leprae* or their sonicated extract. The delipidified component (DCW) appears to be proteinaceous and able to induce antibodies in rabbit. The DCW has affinity to the sera from lepromatous leprosy patients but not sera from normal healthy individuals or tuberculoid leprosy patients. The ability

to

induce lymphocyte proliferation is blocked by agglutination of DCW with patient sera, heat treatment of DCW or protease treatment of the component. Along with lymphocyte proliferation, DCW also induces ability in the macrophages to render phagocytosed *M. leprae* non viable. Thus it is proposed that DCW of *M. leprae* could be a potent immunomodulator for immunodeficient cells of leprosy patients. The efficacy of DCW as a probable immunoprotector for *M. leprae* infection in mice has already been demonstrated earlier.

09/308192

29jan03 10:32:36 User219783 Session D1911.1

SYSTEM:OS - DIALOG OneSearch /  
File 35:Dissertation Abs Online 1861-2003/Dec  
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File 266:FEDRIP 2003/Dec  
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(c) 2003 Inst for Sci Info  
\*File 440: Daily alerts are now available.  
File 348:EUROPEAN PATENTS 1978-2003/Jan W04  
(c) 2003 European Patent Office  
File 357:Derwent Biotech Res. 1982-2003/Jan W4  
(c) 2003 Thomson Derwent & ISI  
\*File 357: File is now current. See HELP NEWS 357.  
Alert feature enhanced for multiple files, etc. See HELP ALERT.  
File 113:European R&D Database 1997  
(c)1997 Reed-Elsevier(UK)Ltd All rts reserv  
\*File 113: This file is closed (no updates)

Set	Items	Description
S1	22016	LAM OR MANLAM OR LIPOARABINOMANNAN? ? OR LIPO(W) (ARABINOMANNAN? ? OR ARABINO(W)MANNAN? ?) OR MYCOLIC OR PEPTIDOGLYCAN? ? OR PEPTIDO(W)GLYCAN? ? OR MDP OR ARABINOGALACTAN? ? OR ARABINO(W)GALACTAN? ? OR GMPD OR MAPG
S2	19	((ACETYLGLUCOSAMINYLY? OR (AC OR ACETYL) (W)GLUCOSAMINYLY?) (S- ) (ACETYLMURAMYL? OR (AC OR ACETYL) (W)MURAMYL?)) (S) (ISOGLUTAMINE OR (I OR ISO) (W)GLUTAMINE)
S11	1424	(S1 OR S2 OR GMDP) (S) (MYCOBACTER? OR (MYCOBACTER? OR M) (W) - (TUBERCULOSIS OR VACCAE OR BOVIS) OR BCG OR CALMETTE(W)GUERIN)
S12	406	S11(S) (CELL(W)WALL? ?)
S14	16	S12 AND (THROMBOCYTOPEN? OR THROMBO(W)CYTOPEN? OR LEUKOPENIA OR LEUCOPENIA OR CIRRHOSIS OR HEPATITIS OR COLITIS OR SJOGREN? OR DERMATOMYOSIT? OR DERMATO(W)MYOSIT? OR SCLERODERM?)
S15	109	S12 AND (DISEAS? OR DISORDER? ? OR IDDM OR DIABET? OR THYROIDIT? OR GASTRITIS OR ANAEMIA OR ANEMIA OR ADDISON? OR VULGARIS OR PEMPHIGOID OR SCLEROSIS OR MS OR ARTHRITIS OR RA OR LUPUS OR SLE OR OPHTHALMIA OR UVEITIS)
S16	56	(S14 OR S15) AND (THERAP? OR TREAT? OR PREVENT?)
S17	27	S16 AND ADMIN?
S18	27	RD (unique items)

>>>No matching display code(s) found in file(s): 65, 113

- Key Terms

18/3,AB/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01377141  
Presentation of hydrophobic antigens to T-cells by CD1 molecules  
Prasentation hydrophober Antigene an T-Zellen mittels CD1 Molekullen



09/308192

Presentation d'antigenes hydrophobes aux cellules T par des molecules CD1  
PATENT ASSIGNEE:

BRIGHAM AND WOMEN'S HOSPITAL, (351461), 75 Francis Street, Boston,  
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(US)  
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Porcelli, Steven A., 77 Hunnewell Avenue, Brighton, Massachusetts 02135,  
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Holdcroft, James Gerald, Dr. et al (31911), Graham Watt & Co., Riverhead,  
Sevenoaks, Kent TN13 2BN, (GB)

PATENT (CC, No, Kind, Date): EP 1170592 A1 020109 (Basic)

APPLICATION (CC, No, Date): EP 2001202176 951013;

PRIORITY (CC, No, Date): US 322979 941013; US 322980 941013; US 501491  
950712; US 501600 950712

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 786088 (EP 95941326)

INTERNATIONAL PATENT CLASS: G01N-033/566; G01N-033/569; C08B-037/00;

C12P-019/04; A61K-039/395; A61K-038/17; A61K-039/04; A61K-039/00;

C12N-005/00

ABSTRACT EP 1170592 A1

Provided are CD1 presented antigens, compositions, cells, inhibitors  
and methods relating to the use of lipoarabinomannan (LAM) antigen  
presentation by CD1 molecules, including: methods for detecting the  
presence of a CD1-presented LAM antigen in a sample; methods for  
isolating such CD1-presented LAM antigens and the isolated antigens;  
vaccines containing CD1-presented LAM antigens and vaccination methods;  
methods of blocking CD1 LAM antigen presentation; methods of identifying  
and/or isolating CD1 blocking agents and the isolated CD1 blocking  
agents; methods of inducing CD1 expression; and T-cells for use in the  
methods disclosed herein.

ABSTRACT WORD COUNT: 91

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200202	280
SPEC A	(English)	200202	22472
Total word count - document A			22752

Searcher : Shears 308-4994

09/308192

Total word count - document B 0  
Total word count - documents A + B 22752

18/3,AB/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01335137

Solid delivery systems for controlled release of molecules incorporated therein and methods of making same

Feste Verabreichungssysteme zur gesteuerten Freisetzung von darin eingebauten Molekullen sowie Verfahren zu deren Herstellung  
Systemes d'administration\*\*\* de substances solides pour la liberation controlee de molecules incorporees dans ces substances et procedes de fabrication de ces systemes

PATENT ASSIGNEE:

QUADRANT HOLDINGS CAMBRIDGE LIMITED, (1445341), 1 Mere Way, Ruddington, Nottingham NG11 7JS, (GB), (Applicant designated States: all)

INVENTOR:

Roser, Bruce Joseph, 4 Archway Court, Barton Road, Cambridge CB3 9LW, (GB)

Colaco, Camilo, 107 Foster Way, Trumpington, Cambridge CB2 2JN, (GB)

Blair, Julian Alexander, Quadrant Holdings Cambridge Limited, 1 Mere Way, Ruddington, Nottingham NG11 6JS, (GB)

Kampinga, Jaap, Rietveldlaan 35, 9731 MJ Groningen, (NL)

LEGAL REPRESENTATIVE:

Perry, Robert Edward (41331), GILL JENNINGS & EVERY Broadgate House 7 Eldon Street, London EC2M 7LH, (GB)

PATENT (CC, No, Kind, Date): EP 1138337 A2 011004 (Basic)

APPLICATION (CC, No, Date): EP 2001116638 950804;

PRIORITY (CC, No, Date): GB 9415810 940804; US 349029 941202

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: LT; LV; SI

RELATED PARENT NUMBER(S) - PN (AN):

EP 773781 (EP 95927856)

INTERNATIONAL PATENT CLASS: A61M-005/00; A61K-009/16; A61K-009/22

ABSTRACT EP 1138337 A2

A device for the topical subcutaneous, intradermal or transdermal delivery of a \*therapeutic\*\*\* agent, wherein the device includes a composition comprises the \*therapeutic\*\*\* agent and a glass-forming polyol and/or a hydrophobic derivatised carbohydrate (HDC) having a carbohydrate backbone up to pentasaccharide in length, wherein more than one hydroxyl group of the carbohydrate is substituted with a less hydrophilic derivative thereof.

ABSTRACT WORD COUNT: 61

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200140	565
SPEC A	(English)	200140	17035
Total word count - document A			17600
Total word count - document B			0
Total word count - documents A + B			17600

09/308192

18/3,AB/3 (Item 3 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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01335136

Solid delivery systems for controlled release of molecules incorporated therein and methods of making same  
Feste Verabreichungssysteme zur gesteuerten Freisetzung von darin eingebauten Molekullen sowie Verfahren zu deren Herstellung  
Systemes d'administration\*\*\* de substances solides pour la liberation controlee de molecules incorporees dans ces substances et procedes de fabrication de ces systemes

PATENT ASSIGNEE:

QUADRANT HOLDINGS CAMBRIDGE LIMITED, (1445341), 1 Mere Way, Ruddington, Nottingham NG11 7JS, (GB), (Applicant designated States: all)

INVENTOR:

Roser, Bruce Joseph, 4 Archway Court, Barton Road, Cambridge CB3 9LW, (GB)  
Colaco, Camilo, 107 Foster Way, Trumpington, Cambridge CB3 9LW, (GB)  
Jerrow, Mohamed Abdel Zahra, 30c Willowbank Road, Aberdeen AB1 24H, (GB)  
Blair, Julian Alexander, Quadrant Holdings Cambridge Limited, 1 Mere Way, Ruddington, Nottingham NG11 6JS, (GB)  
Kampinga, Jaap, Rietveldlaan 35, 9731 MJ Groningen, (NL)  
Wardell, James Lewis, 1 Harcourt Road, Aberdeen AB2 4NY, (GB)  
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LEGAL REPRESENTATIVE:

Perry, Robert Edward (41331), GILL JENNINGS & EVERY Broadgate House 7 Eldon Street, London EC2M 7LH, (GB)

PATENT (CC, No, Kind, Date): EP 1138319 A2 011004 (Basic)

APPLICATION (CC, No, Date): EP 2001116637 950804;

PRIORITY (CC, No, Date): GB 9415810 940804; US 349029 941202

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: LT; LV; SI

RELATED PARENT NUMBER(S) - PN (AN):

EP 773781 (EP 95927856)

INTERNATIONAL PATENT CLASS: A61K-009/16; A61K-009/22

ABSTRACT EP 1138319 A2

A solid composition for \*therapeutic\*\*\* use, comprises a \*therapeutic\*\*\* agent and, as vehicle, a hydrophobic derivatised carbohydrate (HDC) having a carbohydrate backbone up to a pentasaccharide in length, wherein more than one hydroxyl group of the carbohydrate is substituted with a less hydrophilic derivative thereof.

ABSTRACT WORD COUNT: 46

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200140	554
SPEC A	(English)	200140	17034
Total word count - document A			17588
Total word count - document B			0
Total word count - documents A + B			17588

09/308192

18/3,AB/4 (Item 4 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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01276239

A composition comprising a carrier and a purified mycobacterial lipid cell-wall component and its use in the \*prevention\*\*\*, \*treatment\*\*\* and diagnosis of \*disease\*\*\*

Eine Zusammensetzung die ein Trager und ein reinigte Mykobakterielle-Zellwand Komponente enthalt und ihre Verwendung zur Verhinderung, Behandlung und Diagnose von Erkrankungen

Composition renfermant un porteur et un composant lipidique membranaire mycobacterien purifie, son utilisation dans la \*prevention\*\*\*, le traitement et le diagnostic de maladies

PATENT ASSIGNEE:

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INVENTOR:

Verschoor, Jan Adrianus, P.O. Box 70024 The Willows, Pretoria 0041, (ZA)

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Johannsen, Elzbieta, 45 Idol Road, Lynwood Glen, Pretoria 0002, (ZA)

LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 1098199 A1 010509 (Basic)

APPLICATION (CC, No, Date): EP 203989 980303;

PRIORITY (CC, No, Date): ZA 971817 970303; ZA 9710300 971114

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 971733 (EP 98908232)

INTERNATIONAL PATENT CLASS: G01N-033/53

ABSTRACT EP 1098199 A1

The invention relates to a method of diagnosing a mycobacterial infection in a subject comprising the steps of:

contacting a sample from the subject with a purified mycobacterial lipid cell-wall component or analog or derivative thereof or a synthetic form thereof or with a composition comprising a purified mycobacterial lipid cell-wall component or analog or derivative thereof or synthetic form thereof or with a conjugate comprising a purified mycobacterial lipid cell-wall component or analog or derivative thereof or synthetic form thereof and a carrier associated therewith or a composition comprising the conjugate; and

detecting any reaction between the purified mycobacterial lipid cell-wall component or analog or derivative thereof or synthetic form thereof or composition or conjugate and the sample.

The invention also relates to detection means for detecting the presence of antibodies comprising a solid phase and the above purified mycobacterial lipid cell-wall component or analog, derivative, synthetic form, composition or conjugate.

ABSTRACT WORD COUNT: 155

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text Language Update Word Count

09/308192

CLAIMS A	(English)	200119	417
SPEC A	(English)	200119	37350
Total word count - document A			37767
Total word count - document B			0
Total word count - documents A + B			37767

18/3,AB/5 (Item 5 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01189370

BACTERIAL CELL COMPONENT-UNRESPONSIVE MODEL MOUSE  
MODELLMAUS, DIE NICHT AUF BAKTERIELLE ZELLKOMPONENTEN ANSPRICHT.  
MODELE MURIN NE REPONDANT PAS AUX COMPOSANTS CELLULAIRES BACTERIENS  
PATENT ASSIGNEE:

Japan Science and Technology Corporation, (2211031), 1-8, Hon-cho 4-chome  
, Kawaguchi-shi, Saitama 332-0012, (JP), (Applicant designated States:  
all)

INVENTOR:

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562-0031, (JP)  
TAKEUCHI, Osamu, Room 201, 19-3, Onohara-higashi 4-chome, Mino-shi, Osaka  
562-0031, (JP)  
TAKEDA, Kiyoshi, 0-202, 5, Onohara-higashi 5-chome, Mino-shi, Osaka  
562-0031, (JP)

LEGAL REPRESENTATIVE:

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London EC4A 1DA, (GB)

PATENT (CC, No, Kind, Date): EP 1142472 A1 011010 (Basic)  
WO 200041561 000720

APPLICATION (CC, No, Date): EP 2000900372 000113; WO 2000JP132 000113  
PRIORITY (CC, No, Date): JP 997365 990114; JP 99228282 990812; JP 99309238  
991029

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: A01K-067/027; G01N-033/50; G01N-033/15;  
C12N-015/09

ABSTRACT EP 1142472 A1

A knockout mouse which is unresponsive to peptidoglycan, a lipoprotein/lipopeptide and the like, and is useful for elucidating the contribution of individual members of the TLR family to a signaling stimulated with bacterial cell components in vivo, in particular, the role of TLR2 and MyD88 in vivo. A bacterial cell component-unresponsive knockout mouse is generated by a process comprising the steps of: a targeting vector is constructed by replacing a whole or a part of a gene fragment of an exon region containing a cytoplasmic region of TLR2 or MyD88 gene and the like with a plasmid having a poly A signal and a marker gene; the targeting vector is introduced into an embryonic stem cell; the targeting embryonic stem cell having a homologously recombined TLR2 or MyD88 gene is microinjected into the blastocyst of a mouse and the blastocyst is put back into the uterus of a recipient mouse.

ABSTRACT WORD COUNT: 151

NOTE:

Figure number on first page: 0015

LANGUAGE (Publication,Procedural,Application): English; English; Japanese

Searcher : Shears 308-4994

09/308192

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200141	2308
SPEC A	(English)	200141	15829
Total word count - document A			18137
Total word count - document B			0
Total word count - documents A + B			18137

18/3,AB/6 (Item 6 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01063351

USE OF MICROPARTICLES COMBINED WITH SUBMICRON OIL-IN-WATER EMULSIONS  
VERWENDUNG VON MIKROPARTIKELN MIT SUBMIKRON OL/WASSER EMULSIONEN  
UTILISATION DE MICROPARTICULES COMBINEES AVEC DES EMULSIONS HUILE-DANS-EAU  
SUBMICRONIQUES

PATENT ASSIGNEE:

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SINGH, Manmohan, Chiron Corporation, 4560 Horton Street, R-440,  
Emeryville, CA 94608, (US)

LEGAL REPRESENTATIVE:

Hallybone, Huw George et al (53031), Carpmiels and Ransford, 43  
Bloomsbury Square, London WC1A 2RA, (GB)

PATENT (CC, No, Kind, Date): EP 1042001 A1 001011 (Basic)  
EP 1042001 B1 020403  
WO 9930737 990624

APPLICATION (CC, No, Date): EP 98904739 980129; WO 98US1656 980129

PRIORITY (CC, No, Date): US 69724 P 971216

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: A61K-039/12; A61K-009/16

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200214	307
CLAIMS B	(German)	200214	316
CLAIMS B	(French)	200214	417
SPEC B	(English)	200214	8412
Total word count - document A			0
Total word count - document B			9452
Total word count - documents A + B			9452

18/3,AB/7 (Item 7 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

09/308192

00983711

MurA gene from Staphylococcus aureus encoding DP-N-Acetylglucosamine enolpyruvyl transferase

MurA Gen vom Staphylococcus aureus das fur DP-N-Acetylglucosamine enolpyruvyl transferase kodiert

Le gene MurA de Staphylococcus aureus codant pour le DP-N-Acetylglucosamine enolpyruvyl transferase

PATENT ASSIGNEE:

SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (Applicant designated States: all)

SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (Applicant designated States: all)

INVENTOR:

Wallis, Nicola G., SmithKline Beecham PLC, Two New Horizons Court, Brentford, Middlesex TW8 9EP, (GB)

LEGAL REPRESENTATIVE:

Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)

PATENT (CC, No, Kind, Date): EP 890644 A2 990113 (Basic)  
EP 890644 A3 990929

APPLICATION (CC, No, Date): EP 98305253 980701;

PRIORITY (CC, No, Date): US 52214 P 970710

DESIGNATED STATES: BE; CH; DE; DK; FR; GB; IT; LI; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: C12N-015/54; C12N-009/10; C12N-005/10;  
C07K-016/40; C12Q-001/68; G01N-033/53; A61K-038/43; A61K-048/00

ABSTRACT EP 890644 A2

The invention provides MurA polypeptides and polynucleotides encoding MurA polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing MurA polypeptides to screen for antibacterial compounds.

ABSTRACT WORD COUNT: 33

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9902	1899
SPEC A	(English)	9902	19131
Total word count - document A			21030
Total word count - document B			0
Total word count - documents A + B			21030

18/3,AB/8 (Item 8 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00893870

Mur A-1, an UDP-N-acetylglucosamine enolpyruvyl-transferase from Streptococcus pneumoniae

Mur A-1, ein UDP-N-Acetylglucosamine-Enolpyruvyltransferase, aus Streptococcus pneumoniae

Mur A-1, une UDP-N-acetylglucosamine enolpyruvyltransferase, de Streptococcus pneumoniae

PATENT ASSIGNEE:

Searcher : Shears 308-4994

09/308192

SMITHKLINE BEECHAM CORPORATION, (201244), One Franklin Plaza P.O. Box 7929, Philadelphia Pennsylvania 19103, (US), (Applicant designated States: all)

SMITHKLINE BEECHAM PLC, (1267441), New Horizons Court, Brentford, Middlesex TW8 9EP, (GB), (Applicant designated States: all)

INVENTOR:

Wallis, N. G., SmithKline Beecham Pharmaceuticals, 1250 South Collegeville Road, P O Box 5089, Collegeville, PA 19426-0989, (US)

LEGAL REPRESENTATIVE:

Mallalieu, Catherine Louise et al (69621), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)

PATENT (CC, No, Kind, Date): EP 816502 A2 980107 (Basic)  
EP 816502 A3 991020

APPLICATION (CC, No, Date): EP 97304806 970702;

PRIORITY (CC, No, Date): GB 9613907 960703; US 28976 P 961021

DESIGNATED STATES: BE; CH; DE; DK; FR; GB; IT; LI; NL

INTERNATIONAL PATENT CLASS: C12N-015/54; C12N-009/10; C12N-005/10;  
C07K-016/40; C12Q-001/68; G01N-033/53; A61K-038/43; A61K-048/00

ABSTRACT EP 816502 A2

Mur A- 1 polypeptides and DNA (RNA) encoding such Mur A-1 and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such Mur A-1 for the \*treatment\*\*\* of infection, particularly bacterial infections. Antagonists against such Mur A- I and their use as a \*therapeutic\*\*\* to \*treat\*\*\* infections, particularly bacterial infections are also disclosed. Also disclosed are diagnostic assays for detecting \*diseases\*\*\* related to the presence of Mur A-1 nucleic acid sequences and the polypeptides in a host. Also disclosed are diagnostic assays for detecting polynucleotides encoding polypeptides having homology to Mur A-1 and for detecting such polypeptides in a host.

ABSTRACT WORD COUNT: 109

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9802	689
SPEC A	(English)	9802	15008
Total word count - document A			15697
Total word count - document B			0
Total word count - documents A +B			15697

18/3,AB/9 (Item 9 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00772693

PRESENTATION OF LIPOARABINOMANNAN ANTIGENS TO T-CELLS BY CD1 MOLECULES  
PRASENTATION VON AUS LIPOARABINOMANNAN BESTEHENDEN ANTIGENEN AN T-ZELLEN  
DURCH CD1 MOLEKULE

PRESENTATION D'ANTIGENES DE LIPOARABINOMANNANE A DES LYMPHOCYTES T PAR DES  
MOLECULES CD1

PATENT ASSIGNEE:

BRIGHAM & WOMEN'S HOSPITAL, (351466), 75 Francis Street, Boston, MA 02115  
, (US), (Proprietor designated states: all)  
UNIVERSITY OF CALIFORNIA, LOS ANGELES, (1909620), 1400 Ueberroth



09/308192

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states: all)

INVENTOR:

MODLIN, Robert, L., 4034 Benedict Canyon Drive, Sherman Oaks, CA 91423,  
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BRENNER, Michael, B., 11 Gardner Road, Brookline, MA 02146, (US)  
BRENNAN, Patrick, J., 930 Breakwater Drive, Fort Collins, CO 80525, (US)  
PORCELLI, Steven, A., 77 Hunnewell Avenue, Brighton, MA 02135, (US)  
FURLONG, Stephen, T., 13A Regina Road, Randolph, MA 02368, (US)

LEGAL REPRESENTATIVE:

Holdcroft, James Gerald, Dr. (31911), Graham Watt & Co., Riverhead,  
Sevenoaks, Kent TN13 2BN, (GB)

PATENT (CC, No, Kind, Date): EP 786088 A2 970730 (Basic)  
EP 786088 B1 020116  
WO 9612190 960425

APPLICATION (CC, No, Date): EP 95941326 951013; WO 95US13274 951013

PRIORITY (CC, No, Date): US 322979 941013; US 322980 941013; US 501491  
950712; US 501600 950712

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE

RELATED DIVISIONAL NUMBER(S) - PN (AN):

EP 1170592 (EP 2001202176)

INTERNATIONAL PATENT CLASS: G01N-033/566; G01N-033/569; C08B-037/00;  
A61K-038/17; A61K-039/04; A61K-039/00; C12N-005/00

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200203	790
CLAIMS B	(German)	200203	841
CLAIMS B	(French)	200203	1051
SPEC B	(English)	200203	21175
Total word count - document A			0
Total word count - document B			23857
Total word count - documents A + B			23857

18/3,AB/10 (Item 10 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00666448

ORAL VACCINE.

ORALE IMPFSTOFFE.

VACCIN ORAL.

PATENT ASSIGNEE:

DAIICHI PHARMACEUTICAL CO., LTD., (215751), 14-10, Nihonbashi 3-chome,  
Chuo-ku, Tokyo 103, (JP), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;NL;PT;SE)

INVENTOR:

TSUCHIYA, Seishi, 29-12, Higashitoyoda 1-chome, Hino-shi, Tokyo 191, (JP)  
ARAMAKI, Yukihiro, 102, Park Heiz, 517-24, Kitano-cho, Hachioji-shi,  
Tokyo 192, (JP)

Searcher : Shears 308-4994

09/308192

HARA, Toshifumi, 203, Tokyo College, of Pharmacy Shokuinryo, 2258-8,  
Mejirodai 2-chome, Hachioji-shi, Tokyo 193, (JP)  
KIKUCHI, Hiroshi, Daiichi Pharmaceutical Co., Ltd., Tokyo R&D Center,  
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YACHI, Kiyoto, Daiichi Pharmaceutical Co., Ltd., Tokyo R&D Center, 16-13,  
Kitakasai 1-chome, Edogawa-ku, Tokyo 134, (JP)  
IKEUCHI, Tohru, Daiichi Pharmaceutical Co., Ltd., Tokyo R&D Center,  
16-13, Kitakasai 1-chome, Edogawa-ku, Tokyo 134, (JP)

LEGAL REPRESENTATIVE:

Vossius, Volker, Dr. (12524), Dr. Volker Vossius Patentanwaltskanzlei -  
Rechtsanwaltskanzlei Holbeinstrasse 5, D-81679 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 640347 A1 950301 (Basic)  
WO 9317702 930916

APPLICATION (CC, No, Date): EP 93904375 930302; WO 93JP264 930302

PRIORITY (CC, No, Date): JP 9245528 920303

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; NL; PT;  
SE

INTERNATIONAL PATENT CLASS: A61K-039/00;

ABSTRACT EP 640347 A1

An oral vaccine comprising a complex of an antigen with a lipid,  
wherein the lipid contains a phospholipid comprising a glycolipid and/or  
phosphatidylserine combined with mannose. The vaccine serves to produce  
efficiently an antibody against the above antigen after being orally  
\*administered\*\*\* to living organisms. It makes it possible to  
\*administer\*\*\* orally a microbial antigen or a weakly virulent microbe  
which has not been orally absorbable and has been incapable of producing  
an antibody thereagainst.

ABSTRACT WORD COUNT: 77

LANGUAGE (Publication,Procedural,Application): English; English; Japanese  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	727
SPEC A	(English)	EPAB95	4747
Total word count - document A			5474
Total word count - document B			0
Total word count - documents A + B			5474

18/3,AB/11 (Item 11 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00652447

\*TREATMENT\*\*\* OF MYCOBACTERIAL \*DISEASES\*\*\* BY \*ADMINISTRATION\*\*\* OF  
BACTERICIDAL/PERMEABILITY-INCREASING PROTEIN PRODUCTS  
BEHANDLUNG VON MYCOBAKTERIELLEN ERKRANKUNGEN DURCH VERABREICHUNG VON  
BAKTERIENTOTENDE, DURCHLASSIGKEITSERHOHENDE PROTEINFRAGMENTE  
TRAITEMENT DE MALADIES MYCOBACTERIENNES PAR \*ADMINISTRATION\*\*\* DE PRODUITS  
PROTEIQUES BACTERICIDES/AUGMENTANT LA PERMEABILITE

PATENT ASSIGNEE:

Xoma Corporation, (733460), 2910 Seventh Street, Berkeley California  
94710, (US), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

LAMBERT, Lewis H., Jr., 45928 Omega Drive, Fremont, CA 94539, (US)

LEGAL REPRESENTATIVE:

Searcher : Shears 308-4994

09/308192

Brown, John David (28811), FORRESTER & BOEHMERT Franz-Joseph-Strasse 38,  
80801 Munchen, (DE)  
PATENT (CC, No, Kind, Date): EP 690721 A1 960110 (Basic)  
EP 690721 B1 980513  
WO 9420129 940915  
APPLICATION (CC, No, Date): EP 94910876 940311; WO 94US2463 940311  
PRIORITY (CC, No, Date): US 31145 930312  
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE  
INTERNATIONAL PATENT CLASS: A61K-038/00;  
NOTE:

No A-document published by EPO  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9820	292
CLAIMS B	(German)	9820	285
CLAIMS B	(French)	9820	332
SPEC B	(English)	9820	5248
Total word count - document A			0
Total word count - document B			6157
Total word count - documents A + B			6157

18/3,AB/12 (Item 12 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00645377

IMMUNOTHERAPEUTIC COMPOSITION  
IMMUNOTHERAPEUTISCHE ZUBEREITUNG  
COMPOSITION IMMUNOTHERAPEUTIQUE  
PATENT ASSIGNEE:

VETREPHARM, INC., (1587641), 383 Sovereign Road, London, Ontario N6M 1A3,  
(CA), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

ALKEMADE, Stanley J., 112 Goderich Street, East, P.O. Box 1153, Seaforth,  
Ontario N0K 1W0, (CA)  
McRAE, Graeme, 452 Lawson Road, London, Ontario N6G 1X8, (CA)

LEGAL REPRESENTATIVE:

Sternagel, Hans-Gunther, Dr. et al (46853), Patentanwalte Sternagel &  
Fleischer Braunsberger Feld 29, 51429 Bergisch Gladbach, (DE)

PATENT (CC, No, Kind, Date): EP 681479 A1 951115 (Basic)  
EP 681479 B1 990428  
WO 9416727 940804  
APPLICATION (CC, No, Date): EP 94905639 940128; WO 94CA54 940128  
PRIORITY (CC, No, Date): US 11655 930129  
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE  
INTERNATIONAL PATENT CLASS: A61K-039/39; A61K-035/74;  
NOTE:

No A-document published by EPO  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9917	247
CLAIMS B	(German)	9917	222

09/308192

CLAIMS B	(French)	9917	287
SPEC B	(English)	9917	5226
Total word count	- document A		0
Total word count	- document B		5982~
Total word count	- documents A + B		5982

18/3,AB/13 (Item 13 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00608365

NOVEL LIPOPHILIC OLIGOPEPTIDES WITH IMMUNOMODULATING ACTIVITY  
Lipophilen oligopeptide mit immunomodulatorischer Wirkung.  
NOUVEAUX OLIGOPEPTIDES LIPOPHILES A ACTIVITE IMMUNOMODULATRICE  
PATENT ASSIGNEE:

BIOCHEM PHARMA INC., (922804), 275 Armand Frappier Boulevard, Laval,  
Quebec H7V 4A7, (CA), (Proprietor designated states: all)

INVENTOR:

PENNEY, Christopher, 20 Allenbrooke, Dollard des Ormeaux, Quebec H9A 2S5,  
(CA)

ZACHARIE, Boulos, 595 de l'Argentiere 301, Laval, Quebec H7N 4A1, (CA)

LEGAL REPRESENTATIVE:

Ritter, Stephen David (35281), Mathys & Squire 100 Grays Inn Road, London  
WC1X 8AL, (GB)

PATENT (CC, No, Kind, Date): EP 635026 A1 950125 (Basic)  
EP 635026 B1 991110  
WO 9320100 931014

APPLICATION (CC, No, Date): EP 93907719 930402; WO 93CA144 930402

PRIORITY (CC, No, Date): US 862694 920403; US 917464 920721

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE

INTERNATIONAL PATENT CLASS: C07K-005/06; C07K-005/02; C07K-005/08;  
C07C-327/42; A61K-038/04

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9945	328
CLAIMS B	(German)	9945	262
CLAIMS B	(French)	9945	374
SPEC B	(English)	9945	8152
Total word count	- document A		0
Total word count	- document B		9116
Total word count	- documents A + B		9116

18/3,AB/14 (Item 14 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00605234

C-11 modified pradimicin derivatives.

C-11 Modifizierte Pradimicin-Derivate.

Derives de la pradimicine modifies sur le C-11.

PATENT ASSIGNEE:

Bristol-Myers Squibb Company, (205414), 345 Park Avenue, New York, N.Y.

Searcher : Shears 308-4994

09/308192

10154, (US), (applicant designated states:

AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Hoshi, Hideaki, 4-20-12 Fukuei, Ichikawa, (JP)

Aburaki, Shimpei, 4-24-1-302 Ikuta, Tama-ku, KLawasaki, (JP)

LEGAL REPRESENTATIVE:

Durand, Yves Armand Louis (15421), Cabinet Z. Weinstein 20, Avenue de

Friedland, F-75008 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 600782 A1 940608 (Basic)

APPLICATION (CC, No, Date): EP 93402886 931129;

PRIORITY (CC, No, Date): US 983004 921130

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE

INTERNATIONAL PATENT CLASS: C07H-015/244; A61K-031/71;

ABSTRACT EP 600782 A1

A new group of pradimicin derivatives having substituents other than  
OCH(sub 3) in the C-11 position have been discovered. They exhibit  
antibiotic activity. The compounds, and their production from OH- or  
OCH(sub 3)-substituted analogs, are described.

ABSTRACT WORD COUNT: 38

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	834
SPEC A	(English)	EPABF2	8357
Total word count - document A			9191
Total word count - document B			0
Total word count - documents A + B			9191

18/3,AB/15 (Item 15 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00604336

Pradimicins T1 and T2 and 11-0-dexylosylpradimicin T1, new members of the  
pradimicin family of antibiotics.

Pradimicin T1, T2 und 11-0-Dexylosylpradimicin T1, neue Mitglieder der  
Pradimicin-Familie von Antibiotika.

Pradimicines T1, T2 et 11-0-dexylosylpradimicine T1, nouveaux membres de la  
famille des antibiotiques de pradimicine.

PATENT ASSIGNEE:

Bristol-Myers Company, (205411), 345 Park Avenue, New York New York 10154

, (US), (applicant designated states:

AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Hasegawa, Toshifumi, Meiji Seika Megura Jutaku A-203, 2-9-22, Himonia,  
Meguro-ku, (JP)

Yamamoto, Haruaki, 702-3 Tama, Tokyo 206, (JP)

Kakushima, Masatoshi, 9-1, 1-204 Ikuta, Tama-ku, Isehara, Kanagawa 259-11  
, (JP)

Aburaki, Shimpei, 4-24-1-302 Ikuta, Tama-ku, Kawasaki, Kanagawa 214, (JP)

Furumai, Tamotsu, 436 Iwai-cho, Hodogaya-ku, Yokohama 240, (JP)

LEGAL REPRESENTATIVE:

Durand, Yves Armand Louis et al (15422), CABINET WEINSTEIN 20, Avenue de

Friedland, F-75008 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 581652 A1 940202 (Basic)

Searcher : Shears 308-4994

09/308192

APPLICATION (CC, No, Date): EP 93401909 930722;  
PRIORITY (CC, No, Date): US 920408 920727  
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;  
NL; PT; SE  
INTERNATIONAL PATENT CLASS: C07H-015/244; A61K-031/71; C12P-019/56;  
C12N-001/20; C12N-001/20; C12R-001/04

ABSTRACT EP 581652 A1

Novel pradimicin compounds (I) are useful in the \*treatment\*\*\* of  
infectious \*diseases\*\*\*. (see image in original document)  
ABSTRACT WORD COUNT: 19

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	179
SPEC A	(English)	EPABF2	3111
Total word count - document A			3290
Total word count - document B			0
Total word count - documents A + B			3290

18/3,AB/16 (Item 16 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00584325

INDUCTION OF CYTOTOXIC T-LYMPHOCYTE RESPONSES  
ANREGUNG VON ANTWORTEN ZYTOTOXISCHER T-LYMPHOZYTEN  
INDUCTION DE REPONSES DE LYMPHOCYTES T CYTOTOXIQUES  
PATENT ASSIGNEE:

IDEC PHARMACEUTICALS CORPORATION, (1041962), 11011 Torreyana Road, San  
Diego, CA 92121-1104, (US), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;MC;NL;SE)

INVENTOR:

RAYCHAUDHURI, Syamal, 3716 Carmel View Road, San Diego, CA 92130, (US)  
RASTETTER, William, H., 16067 Puerta del Sol, Rancho Santa Fe, CA 92067,  
(US)

LEGAL REPRESENTATIVE:

Campbell, Patrick John Henry et al (80141), J.A. Kemp & Co., 14 South  
Square, Gray's Inn, London WC1R 5LX, (GB)

PATENT (CC, No, Kind, Date): EP 596032 A1 940511 (Basic)  
EP 596032 A1 940817  
EP 596032 B1 980527  
WO 9301831 930204

APPLICATION (CC, No, Date): EP 92917479 920724; WO 92US6193 920724  
PRIORITY (CC, No, Date): US 735069 910725  
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; MC; NL;  
SE  
INTERNATIONAL PATENT CLASS: A61K-039/00;  
NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9822	2696
CLAIMS B	(German)	9822	2644
CLAIMS B	(French)	9822	3358

Searcher : Shears 308-4994

09/308192

SPEC B (English) 9822 7686  
Total word count - document A 0  
Total word count - document B 16384  
Total word count - documents A + B 16384

18/3,AB/17 (Item 17 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00540091

Vaccines and methods for their production  
Impfstoffe und Verfahren zu ihrer Herstellung  
Vaccins et methodes pour leur production  
PATENT ASSIGNEE:

RETROSCREEN LIMITED, (1142730), 64 Turner Street, London E1 2AD, (GB),

(applicant designated states:

AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Oxford, John Sidney, 70 Holden Road, Woodside Park, London N12 7DY, (GB)

LEGAL REPRESENTATIVE:

Lord, Hilton David et al (59391), MARKS & CLERK, 57-60 Lincoln's Inn

Fields, London WC2A 3LS, (GB)

PATENT (CC, No, Kind, Date): EP 514199 A2 921119 (Basic)

EP 514199 A3 931110

EP 514199 B1 981028

APPLICATION (CC, No, Date): EP 92304422 920515;

PRIORITY (CC, No, Date): GB 9110808 910517

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; MC; NL;

PT; SE

INTERNATIONAL PATENT CLASS: A61K-039/12; A61K-039/21; A61K-039/39;

C12N-007/06;

ABSTRACT EP 514199 A2

The present invention relates to the production of vaccines having improved safety, particularly to a process therefor which allows even an AIDS vaccine to be manufactured, comprising in order, the steps of:

- a) \*treating\*\*\* the virus with a general inactivating agent;
- b) deaggregating the virus with a suitable solvent or detergent;
- c) \*treating\*\*\* the virus with an RNA and/or DNA inactivating agent;

and

- d) stabilising the virus with a suitable cross-linking agent.

ABSTRACT WORD COUNT: 76

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9844	537
CLAIMS B	(German)	9844	521
CLAIMS B	(French)	9844	613
SPEC B	(English)	9844	6009
Total word count - document A			0
Total word count - document B			7680
Total word count - documents A + B			7680

18/3,AB/18 (Item 18 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS

Searcher : Shears 308-4994

09/308192

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00524051

Vaccine adjuvant comprising a tetra-polyol  
Einen Tetra-Polyol enthaltendes Impfstoff-Adjuvans  
Adjuvant pour vaccin comprenant un tetra-polyol  
PATENT ASSIGNEE:

SYNTEX (U.S.A.) INC., (200863), 3401 Hillview Avenue, Palo Alto  
California 94304, (US), (applicant designated states:  
AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Allison, Anthony Clifford, 2513 Hastings Dr., Belmont, CA 94002, (US)  
Byars, Noelene Elva, 1092 Syracuse Dr., Sunnyvale, CA 94087, (US)  
Fu, Cherng-Chyi, 14050 Shadow Oaks Way, Saratoga, CA 95070, (US)  
Lidgate, Deborah Marilyn, 325 Arboleda Drive, Los Altos, CA 94022, (US)  
Felgner, Philip Lewis, P.O. Box 3302, Rancho Sante Fe, CA 92067, (US)  
Foster, Linda Cheryl, 733 Carolina Avenue, Sunnyvale, CA 94086, (US)  
Lee, William Alfred, 749 Anderson Drive, Los Altos, CA 94022, (US)

LEGAL REPRESENTATIVE:

Witte, Hubert et al (78221), F.Hoffmann-La Roche AG Patent Department  
(PLP), 124 Grenzacherstrasse, 4070 Basel, (CH)

PATENT (CC, No, Kind, Date): EP 513861 A1 921119 (Basic)  
EP 513861 B1 970226

APPLICATION (CC, No, Date): EP 92113037 881102;

PRIORITY (CC, No, Date): US 116425 871103

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 315153 (EP 881182638)

INTERNATIONAL PATENT CLASS: A61K-039/39;

ABSTRACT EP 513861 A1

An adjuvant for potentiating the immunogenicity of an antigen, suitable  
for manufacture on a commercial scale, is an emulsion having oily  
particles dispersed in a continuous aqueous phase, which emulsion  
comprises: an emulsion-forming amount of a non-toxic tetra-polyol;  
optionally, an emulsion-forming amount of a non-toxic metabolizable  
oil; optionally, an emulsion-stabilizing amount of a glycol ether-based  
surfactant; and an immunopotentiating amount of a glycopeptide.

ABSTRACT WORD COUNT: 65

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	859
CLAIMS B	(English)	EPAB97	847
CLAIMS B	(German)	EPAB97	822
CLAIMS B	(French)	EPAB97	972
SPEC A	(English)	EPABF1	6064
SPEC B	(English)	EPAB97	5609
Total word count - document A			6923
Total word count - document B			8250
Total word count - documents A + B			15173

18/3,AB/19 (Item 19 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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09/308192

00523502

Production of pradimicin antibiotics by actinomadura strain.

Herstellung von Pradimicin-Antibiotika durch Actinomadura-Stamm.

Production d'antibiotiques du type pradimicine par une souche d'actinomadura.

PATENT ASSIGNEE:

Bristol-Myers Squibb Company, (205414), 345 Park Avenue, New York, N.Y.

10154, (US), (applicant designated states:

AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Furumai, Tamotsu, 436 Iwai-cho, Hodogaya-ku, Yokohama, (JP)

Hatori, Masami, 2-16-12, Kurihamadai, Yokosuka, (JP)

Kakushima, Masatoshi, 9-1-1-204, 3 chome, Osumidai, Isehara, (JP)

Ikeda, Chiharu, 6-24-4, Arakawa, Arakawa, (JP)

Saitoh, Kyoichiro, 2-8-19, Numama, Zushi, (JP)

Kobaru, Seikichi, 3-1576-9, Hasama-cho, Funabashi, Chiba, (JP)

LEGAL REPRESENTATIVE:

Kinzebach, Werner, Dr. et al (6468), Patentanwalte Reitstotter, Kinzebach

und Partner Sternwartstrasse 4 Postfach 86 06 49, W-8000 Munchen 86,

(DE)

PATENT (CC, No, Kind, Date): EP 525588 A2 930203 (Basic)

EP 525588 A3 940330

APPLICATION (CC, No, Date): EP 92112440 920721;

PRIORITY (CC, No, Date): US 739019 910731

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: C12P-019/56; C07H-015/244; C12N-001/20;

C12P-019/56; C12R-001/03; C12N-001/20; C12R-001/03

ABSTRACT EP 525588 A2

The present invention relates to a fermentation process for producing BMY-28960 and desxylosyl BMY-28960, and to a novel BMY-28960-producing organism belonging to the genus Actinomadura and designated as strain AB 1236 (ATCC 55208).

ABSTRACT WORD COUNT: 35

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	EPABF1	172
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SPEC A	(English)	EPABF1	3542
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Total word count - document A	3714
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Total word count - document B	0
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Total word count - documents A + B	3714
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18/3,AB/20 (Item 20 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00507520

VACCINE COMPOSITIONS CONTAINING LIPOSOMES

LIPOSOMEN ENTHALTENDE IMPFSTOFFZUSAMMENSETZUNGEN

COMPOSITIONS DE VACCINS CONTENANT DES LIPOSOMES

PATENT ASSIGNEE:

CHIRON CORPORATION, (572531), 4560 Horton Street, R440, Emeryville

California 94608-2916, (US), (Proprietor designated states: all)

INVENTOR:

Searcher : Shears 308-4994

09/308192

BARCHFELD, Gail, L., 404 Central Avenue, Apt. B, Alameda, CA 94501, (US)  
OTT, Gary, 6625 Knobcone Street, Tahoma, CA 95733, (US)  
VAN NEST, Gary, A., 4890 San Pablo Dam Road, El Sobrante, CA 94803, (US)

LEGAL REPRESENTATIVE:

Hallybone, Huw George (53031), CARPMAELS AND RANSFORD 43 Bloomsbury  
Square, London WC1A 2RA, (GB)

PATENT (CC, No, Kind, Date): EP 489153 A1 920610 (Basic)  
EP 489153 A1 930421  
EP 489153 B1 991013  
WO 9200081 920109

APPLICATION (CC, No, Date): EP 91914563 910625; WO 91US4532 910625

PRIORITY (CC, No, Date): US 546585 900629

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: A61K-031/74; A61K-038/00; A61K-038/16;

A61K-039/02; A61K-039/04; A61K-039/12

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9941	609
CLAIMS B	(German)	9941	521
CLAIMS B	(French)	9941	648
SPEC B	(English)	9941	12686
Total word count - document A			0
Total word count - document B			14464
Total word count - documents A + B			14464

18/3,AB/21 (Item 21 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00502617

PURIFIED gp120 COMPOSITION RETAINING NATURAL CONFORMATION

GEREINIGTES GP120, IN DEM SEINE NATURLICHE KONFORMATION ERHALTEN BLEIBT

COMPOSITION DE gp120 PURIFIEE PRESERVANT SA CONFORMATION NATURELLE

PATENT ASSIGNEE:

CHIRON CORPORATION, (572530), 4560 Horton Street, Emeryville, California  
94608, (US), (Proprietor designated states: all)

INVENTOR:

HAIGWOOD, Nancy, L., 7050 Sayre Drive, Oakland, CA 94611, (US)

SCANDELLA, Carl, J., 7050 Sayre Drive, Oakland, CA 94611, (US)

LEGAL REPRESENTATIVE:

Hallybone, Huw George et al (53031), CARPMAELS AND RANSFORD 43 Bloomsbury  
Square, London WC1A 2RA, (GB)

PATENT (CC, No, Kind, Date): EP 519001 A1 921223 (Basic)  
EP 519001 B1 011031  
WO 9113906 910919

APPLICATION (CC, No, Date): EP 91906615 910308; WO 91US1484 910308

PRIORITY (CC, No, Date): US 490858 900309

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C07K-001/00; A61K-039/21; C12N-015/49

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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09/308192

CLAIMS B	(English)	200144	237
CLAIMS B	(German)	200144	211
CLAIMS B	(French)	200144	267
SPEC B	(English)	200144	17121
Total word count	- document A		0
Total word count	- document B		17836
Total word count	- documents A + B		17836

18/3,AB/22 (Item 22 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00443716

USE OF A REAGENT FOR DETECTING ANTIBODY CORRESPONDING TO ACID-FAST BACTERIUM ANTIGEN.

VERWENDUNG VON EINEM REAGENS ZUM NACHWEIS EINES MIT EINEM SAUREBESTANDIGEN BAKTERIENANTIGEN UBEREINSTIMMENDEN ANTIKORPERS.

UTILISATION D'UN REACTIF POUR LA DETECTION D'UN ANTICORPS CORRESPONDANT A UN ANTIGENE DE BACTERIE RESISTANTE A L'ACIDE.

PATENT ASSIGNEE:

SAWAI PHARMACEUTICAL CO., LTD., (238421), 4-25, Akagawa 1-chome Asahi-ku, Osaka-shi Osaka 535, (JP), (applicant designated states: DE;FR;GB;IT)

MEDISA SHINYAKU INC., (1072270), 15-9, Nihonbashihoncho 4-chome Chuo-ku, Tokyo 103, (JP), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

YANO, Ikuya, 16-11, Minoh 4-chome Minoh-shi, Osaka 562, (JP)

OKA, Shiro, 7-4, Higashihagoromo 5-chome, Takaishi-shi Osaka 592, (JP)

UENO, Yoshiteru, 14-16, Kitajocho 2-chome, Toyonaka-shi Osaka 561, (JP)

NATSUHARA, Yayoi, 15-404, 3-ban, Tomobuchicho 1-chome, Miyakojima-ku Osaka-shi Osaka 534, (JP)

YOSHINAGA, Junji, 37-13, Kunimatsu-cho, Neyagawa-shi Osaka 572, (JP)

KATO, Yoshiko, 7-36, Koyoenhigashiyamacho, Nishinomiya-shi Hyogo 662, (JP)

LEGAL REPRESENTATIVE:

von Kreisler, Alek, Dipl.-Chem. et al (12434), Patentanwalte von Kreisler-Selting-Werner Postfach 10 22 41, D-50462 Koln, (DE)

PATENT (CC, No, Kind, Date): EP 407605 A1 910116 (Basic)

EP 407605 A1 930310

EP 407605 B1 950913

WO 9008323 900726

APPLICATION (CC, No, Date): EP 90901034 891228; WO 89JP1341 891228

PRIORITY (CC, No, Date): JP 8910356 890118; JP 8983836 890401

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G01N-033/569;

LANGUAGE (Publication,Procedural,Application): English; English; Japanese

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB95	215
CLAIMS B	(German)	EPAB95	206
CLAIMS B	(French)	EPAB95	281
SPEC B	(English)	EPAB95	7163
Total word count	- document A		0
Total word count	- document B		7865
Total word count	- documents A + B		7865

18/3,AB/23 (Item 23 from file: 348)

09/308192

DIALOG(R)File 348:EUROPEAN PATENTS

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00401554

Adjuvant formulation comprising a submicron oil droplet emulsion.

Hilfsmittelformulierung die eine Emulsion mit submikronischen Oeltropfen  
enthalt.

Formulation d'adjuvant contenant une emulsion de gouttes d'huile  
submicroniques.

PATENT ASSIGNEE:

CHIRON CORPORATION, (572530), 4560 Horton Street, Emeryville, California  
94608, (US), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Van Nest, Gary, 4890 San Pablo Dam Road, El Sobrante, California 94803,  
(US)

Ott, Gary, 1865 Warsaw Avenue, Livermore, California 94550, (US)

Barchfeld, Gail, 404 Central Avenue, Apt. B, Alameda, California 94501,  
(US)

LEGAL REPRESENTATIVE:

Hallybone, Huw George et al (53031), CARPMAELS AND RANSFORD 43 Bloomsbury  
Square, London WC1A 2RA, (GB)

PATENT (CC, No, Kind, Date): EP 399843 A2 901128 (Basic)  
EP 399843 A3 920902  
EP 399843 B1 940713

APPLICATION (CC, No, Date): EP 90305744 900525;

PRIORITY (CC, No, Date): US 357035 890525

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: A61K-009/107; A61K-039/39;

ABSTRACT EP 399843 A2

An adjuvant composition, comprising a metabolizable oil and an  
emulsifying agent, wherein the oil and the detergent are present in the  
form of an oil-in-water emulsion having oil droplets substantially all of  
which are less than 1 micron in diameter. In preferred embodiments, the  
emulsifying agent is also an immunostimulating agent, such as a  
lipophilic muramyl peptide. Alternatively, an immunostimulating agent  
separate from the emulsifying agent can be used.

ABSTRACT WORD COUNT: 73

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPBBF1	742
CLAIMS B	(English)	EPBBF1	1356
CLAIMS B	(German)	EPBBF1	1185
CLAIMS B	(French)	EPBBF1	1606
SPEC A	(English)	EPBBF1	10473
SPEC B	(English)	EPBBF1	10494
Total word count - document A			11215
Total word count - document B			14641
Total word count - documents A + B			25856

18/3,AB/24 (Item 24 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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09/308192

00381059

A METHOD OF MAINTAINING A DESIRED RECOMBINANT GENE IN A GENETIC POPULATION OF CELLS.

VERFAHREN ZUR ERHALTUNG EINES ERWUNSCHTEN REKOMBINANTEN GENS IN EINER GENETISCHEN ZELLPOPULATION.

PROCEDE PERMETTANT DE MAINTENIR UN GENE RECOMBINANT DESIRE DANS UNE POPULATION CELLULAIRE GENETIQUE.

PATENT ASSIGNEE:

WASHINGTON UNIVERSITY, (645448), 1 Brookings Drive, St. Louis, MO 63130, (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

INVENTOR:

CURTISS Roy, III, 6065 Lindel Street, Saint Louis, MO 63112, (US)

LEGAL REPRESENTATIVE:

Goldin, Douglas Michael et al (31061), J.A. KEMP & CO. 14, South Square Gray's Inn, London WC1R 5LX, (GB)

PATENT (CC, No, Kind, Date): EP 381706 A1 900816 (Basic)

EP 381706 A1 910911

EP 381706 B1 950426

WO 8903427 890420

APPLICATION (CC, No, Date): EP 89900028 881006; WO 88US3496 881006

PRIORITY (CC, No, Date): US 106072 871007; US 251304 881003

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C12N-015/68; C12N-001/21; A61K-038/00;

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB95	573
CLAIMS B	(German)	EPAB95	575
CLAIMS B	(French)	EPAB95	648
SPEC B	(English)	EPAB95	17128
Total word count - document A			0
Total word count - document B			18924
Total word count - documents A + B			18924

18/3,AB/25 (Item 25 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00373065

Macrolide compounds.

Makrolide Verbindungen.

Composes macrolides.

PATENT ASSIGNEE:

DowElanco, (1237354), 9002 Purdue Road, Indianapolis, Indiana 46268-1189, (US), (applicant designated states:

AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Boeck, LaVerne Dwaine, 741 Chapel Hill West Drive, Indianapolis Indiana 46214, (US)

Chio, Hang, 128 Lakeview Court South, Greenfield Indiana 46140, (US)

Eaton, Tom Edward, 3991 Santa Clara Drive, Greenwood Indiana 46142, (US)

Godfrey, Otis Webster, Jr., 222 Serenity Way, Greenwood Indiana 46242, (US)

Michel, Karl Heinz, 225 East North Street Apt. 2205, Indianapolis Indiana 46204, (US)

09/308192

Nakatsukasa, Walter Mitsuo, 1517 Iron Liege Road, Indianapolis Indiana  
46217, (US)

Yao, Raymond Che-Fong, 1189 Woodgate Drive, Carmel Indiana 46032, (US)

LEGAL REPRESENTATIVE:

Raynor, John et al (43031), W.H. Beck, Greener & Co 7 Stone Buildings

Lincoln's Inn, London WC2A 3SZ, (GB)

PATENT (CC, No, Kind, Date): EP 375316 A1 900627 (Basic)

EP 375316 B1 941228

APPLICATION (CC, No, Date): EP 89313195 891218;

PRIORITY (CC, No, Date): US 286591 881219; US 429441 891030

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C07H-017/08; C12P-019/62; C12N-001/20;

C12N-001/20; C12R-001/01; C12P-019/62; C12R-001/01

ABSTRACT EP 375316 A1

Fermentation product A83543 (1), comprising major components A83543A and A83543D and minor components A83543B, A83543C, A83543E, A83543F, A83543G, A83543H and A83543J, is produced by a newly described species, *Saccharopolyspora spinosa*. The A83543 components and their acid-addition salts (A83543 compounds) are useful as insecticides, particularly against Lepidoptera and Diptera species. Insecticidal, miticidal or ectoparasitocidal combinations, compositions and methods are provided. (see image in original document) wherein R is H or a group selected from (see image in original document) R(sup 2) is (see image in original document) R(sup 1), R(sup 3), R(sup 5) and R(sup 6) are hydrogen or methyl;

R(sub 4) is methyl or ethyl; or an acid addition salt thereof the compounds when R is other than hydrogen.

ABSTRACT WORD COUNT: 123

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPBBF2	846
CLAIMS B	(English)	EPBBF2	786
CLAIMS B	(German)	EPBBF2	729
CLAIMS B	(French)	EPBBF2	962
SPEC A	(English)	EPBBF2	10194
SPEC B	(English)	EPBBF2	10207
Total word count - document A			11040
Total word count - document B			12684
Total word count - documents A + B			23724

18/3,AB/26 (Item 26 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00334894

Novel polymeric immunological adjuvants.

Neue polymerische Immuno-Adjuvans.

Nouvel adjuvant immunologique polymeric.

PATENT ASSIGNEE:

Ribi, Hans O., (914860), 1465 Woodberry Avenue, San Mateo California

94403, (US), (applicant designated states:

AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Ribi, Hans O., 1465 Woodberry Avenue, San Mateo California 94403, (US)

09/308192

LEGAL REPRESENTATIVE:

Glawe, Delfs, Moll & Partner Patentanwälte (100692), Postfach 26 01 62  
Liebherrstrasse 20, D-8000 Munchen 26, (DE)  
PATENT (CC, No, Kind, Date): EP 324455 A2 890719 (Basic)  
EP 324455 A3 910327  
APPLICATION (CC, No, Date): EP 89100427 890111;  
PRIORITY (CC, No, Date): US 144408 880115  
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE  
INTERNATIONAL PATENT CLASS: A61K-039/39; A61K-047/00; A61K-009/10;

ABSTRACT EP 324455 A2

Adjuvants for enhancing the immune response to an antigen are provided comprising the adjuvant incorporated into a lipid layer where the adjuvant is covalently or non-covalently involved in a polymeric system. Conveniently, the adjuvant may be conjugated to a polymerizable group and co-polymerized with a water-soluble and/or amphiphilic polymerizable monomer or combined with a polymerized amphiphile. The adjuvant and antigen may then be \*administered\*\*\* to a mammalian host to obtain enhanced immune response.

ABSTRACT WORD COUNT: 77

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	428
SPEC A	(English)	EPABF1	7311
Total word count - document A			7739
Total word count - document B			0
Total word count - documents A + B			7739

18/3,AB/27 (Item 27 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00301600

Vaccine adjuvant.  
Impfstoff-Adjuvans.  
Adjuvant pour vaccin.

PATENT ASSIGNEE:

SYNTEX (U.S.A.) INC., (200860), 3401 Hillview Avenue, Palo Alto  
California 94303, (US), (applicant designated states:  
AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Allison, Anthony Clifford, 2513 Hastings Drive, Belmont, CA 94002, (US)  
Byars, Noelene Elva, 1092 Syracuse Drive, Sunnyvale, CA 94087, (US)  
Fu, Cherng-Chyi, 14050 Shadow Oaks Way, Saratoga, CA 95070, (US)  
Lidgate, Deborah Marilyn, 325 Arboleda Drive, Los Altos, CA 94022, (US)  
Felgner, Philip Lewis, P.O. Box 3392, Rancho Santa Fe, CA 92067, (US)  
Foster, Linda Cheryl, 733 Carolina Avenue, Sunnyvale, CA 94086, (US)  
Lee, William Alfred, 749 Anderson Drive, Los Altos, CA 94022, (US)

LEGAL REPRESENTATIVE:

Barz, Peter, Dr. et al (1461), Patentanwälte Dipl.-Ing. G. Dannenberg Dr.  
P. Weinhold, Dr. D. Gudel Dipl.-Ing. S. Schubert, Dr. P. Barz  
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PATENT (CC, No, Kind, Date): EP 315153 A2 890510 (Basic)  
EP 315153 A3 890809  
EP 315153 B1 940511

Searcher : Shears 308-4994

09/308192

APPLICATION (CC, No, Date): EP 88118263 881102;  
PRIORITY (CC, No, Date): US 116425 871103  
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE  
INTERNATIONAL PATENT CLASS: A61K-039/39;

ABSTRACT EP 315153 A2

An adjuvant for potentiating the immunogenicity of an antigen, suitable for manufacture on a commercial scale, is an emulsion having oily particles dispersed in a continuous aqueous phase, which emulsion comprises: an emulsion-forming amount of a non-toxic tetra-polyol or polyoxyethylene-polyoxypropylene (POP-POE) block polymer; optionally, an emulsion-forming amount of a non-toxic metabolizable oil; optionally, an emulsion-stabilizing amount of a glycol ether-based surfactant; and an immunopotentiating amount of a glycopeptide;

wherein substantially all of said oily particles have a diameter less than about 800 nm if a POP-POE block polymer is present.

ABSTRACT WORD COUNT: 94

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	2479
CLAIMS B	(German)	EPBBF1	2354
CLAIMS B	(French)	EPBBF1	2924
SPEC B	(English)	EPBBF1	8557
Total word count - document A			0
Total word count - document B			16314
Total word count - documents A + B			16314

Set	Items	Description
S19	0	AU=(BAXTER, A? OR BAXTER A?) AND S11
S20	27	AU=(BAXTER, A? OR BAXTER A?) AND (MYCOBACTER? OR (MYCOBACTER? OR M) (W) (TUBERCULOSIS OR VACCAE OR BOVIS) OR BCG OR CALMETTE(W) GUERIN)
S21	27	S20 NOT S17
S22	9	RD (unique items)

>>>No matching display code(s) found in file(s): 65, 113

- Author

22/3,AB/1 (Item 1 from file: 144)  
DIALOG(R)File 144:Pascal  
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15297176 PASCAL No.: 01-0470149  
The NOD mouse as a model of SLE  
SILVEIRA Pablo A; \*BAXTER Alan G\*\*\*  
Centenary Institute of Cancer Medicine and Cell Biology, Locked bag #6,  
Newtown NSW 2042, Australia  
Journal: Autoimmunity : (Chur, Switzerland), 2001, 34 (1) 53-64  
Language: English

In addition to developing a high incidence of type 1 diabetes caused by a specific autoimmune response against pancreatic p cells in the islets of Langerhans, NOD mice also demonstrate spontaneous autoimmunity to other targets including the thymus, adrenal gland, salivary glands, thyroid, testis, nuclear components and red blood cells. Moreover, treatment of pre-diabetic NOD mice with an intravenous dose of heat killed \*Mycobacterium\*\*\* \*bovis\*\*\* (\*M\*\*\*. \*bovis\*\*\*; bacillus \*Calmette\*\*\*- \*Guerin\*\*\* (\*BCG\*\*\* )) protects them from developing type 1 diabetes, but instead precipitates an autoimmune rheumatic disease similar to systemic



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lupus erythematosus (SLE), characterised by accelerated and increased incidence of haemolytic anaemia (HA), anti-nuclear autoantibody (ANA) production, exacerbation of sialadenitis, and the appearance of immune complex-mediated glomerulonephritis (GN). The reciprocal switching between the two phenotypes by a single environmental trigger (\*mycobacterial\*\*\* exposure) raised the possibility that genetic susceptibility for type 1 diabetes and SLE may be conferred by a single collection of genes in the NOD mouse. This review will focus on the genetic components predisposing NOD mice to SLE induced by \*BCG\*\*\* treatment and compare them to previously determined diabetes susceptibility genes in this strain and SLE susceptibility genes in the BXSB, MRL and the New Zealand mouse strains.

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22/3,AB/2 (Item 2 from file: 144)  
DIALOG(R)File 144:Pascal  
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11688920 PASCAL No.: 94-0550930  
\*Mycobacteria\*\*\* precipitate autoimmune rheumatic disease in NOD mice via an adjuvant-like activity  
\*BAXTER A G\*\*\*; HEALEY D; COOKE A  
Univ. Cambridge, dep. pathology, Cambridge CB2 1QP, United Kingdom  
Journal: Scandinavian journal of immunology, 1994, 39 (6) 602-606  
Language: English  
NOD mice spontaneously develop organ-specific autoimmunity and are widely used as a model for diabetes. NOD mice also exhibit some features of non-organ specific autoimmune rheumatic disease such as thymocytotoxic and anti-nuclear autoantibodies and they develop haemolytic anaemia in senescence. A single dose of  $2.6 \times 10^5$  SUP 7 heat-killed Bacillus \*Calmette\*\*\* -\*Guerin\*\*\* (\*BCG\*\*\* ) i.v. in 8-week-old NOD mice prevented diabetes but precipitated a syndrome similar to systemic lupus erythematosus (SLE), in which treated mice rapidly developed haemolytic anaemia, high titre anti-DNA and anti-Sm antinuclear autoantibodies, perivascular lymphocytic infiltration in the kidneys and glomerular immune complex deposition. Here, we examined the mechanism of action by which \*BCG\*\*\* precipitated rheumatic autoimmune disease in NOD mice

22/3,AB/3 (Item 1 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
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14066494 Document Delivery Available: 000175436800002 References: 36  
TITLE: Polyspecificity of autoimmune responses in type 1 (autoimmune) diabetes  
AUTHOR(S): Esteban LM; \*Baxter AG (REPRINT)\*\*\*  
AUTHOR(S) E-MAIL: A.Baxter@centenary.usyd.edu.au  
CORPORATE SOURCE: Centenary Inst Canc Med & Cell Biol, Locked Bag 6/Newtown/NSW 2042/Australia/ (REPRINT); Centenary Inst Canc Med & Cell Biol, /Newtown/NSW 2042/Australia/  
PUBLICATION TYPE: JOURNAL  
PUBLICATION: CLINICAL AND EXPERIMENTAL IMMUNOLOGY, 2001, V126, N2 (NOV), P 184-186  
GENUINE ARTICLE#: 549GU  
PUBLISHER: BLACKWELL PUBLISHING LTD, P O BOX 88, OSNEY MEAD, OXFORD OX2 ONE, OXON, ENGLAND

Searcher : Shears 308-4994

09/308192

ISSN: 0009-9104

LANGUAGE: English DOCUMENT TYPE: EDITORIAL MATERIAL

22/3,AB/4 (Item 2 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

11842456 References: 80

TITLE: Linkage analysis of systemic lupus erythematosus induced in  
diabetes-prone nonobese diabetic mice by \*Mycobacterium\*\*\* \*bovis\*\*\*  
AUTHOR(S): Jordan MA; Silveira PA; Shepherd DP; Chu C; Kinder SJ; Chen JH;  
Palmisano LJ; Poulton LD; \*Baxter AG (REPRINT)\*\*\*  
AUTHOR(S) E-MAIL: A.Baxter@Centenary.usyd.edu.au  
CORPORATE SOURCE: Centenary Inst Canc Med & Cell Biol, Locked Bag  
6/Newtown/NSW 2042/Australia/ (REPRINT); Centenary Inst Canc Med & Cell  
Biol, /Newtown/NSW 2042/Australia/  
PUBLICATION TYPE: JOURNAL  
PUBLICATION: JOURNAL OF IMMUNOLOGY, 2000, V165, N3 (AUG 1), P1673-1684  
GENUINE ARTICLE#: 337CV  
PUBLISHER: AMER ASSOC IMMUNOLOGISTS, 9650 ROCKVILLE PIKE, BETHESDA, MD  
20814 USA  
ISSN: 0022-1767  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: Systemic lupus erythematosus induced by \*Mycobacterium\*\*\*  
\*bovis\*\*\* in diabetes-prone nonobese diabetic mice was mapped in a  
backcross to the BALB/c strain. The subphenotypes-hemolytic anemia,  
antinuclear autoantibodies, and glomerular immune complex deposition-did  
not cosegregate, and linkage analysis for each trait was performed  
independently. Hemolytic anemia mapped to two loci: Bahl at the MHC on  
chromosome 17 and Bah2 on distal chromosome 16, Antinuclear autoantibodies  
mapped to three loci: Banal at the MHC on chromosome 17, Bana2 on  
chromosome 10, and Bana3 on distal chromosome 1. Glomerular immune complex  
deposition did not show significant linkage to any genomic region, Mapping  
of autoantibodies (Coombs' or antinuclear autoantibodies) identified two  
loci: Babs1 at the MHC and Babs2 on distal chromosome 1, It has previously  
been reported that genes conferring susceptibility to different autoimmune  
diseases map nonrandomly to defined regions of the genome, One possible  
explanation for this clustering is that some alleles at loci within these  
regions confer susceptibility to multiple autoimmune diseases-the "common  
gene" hypothesis. With the exception of the H2, this study failed to  
provide direct support for the common gene hypothesis, because the loci  
identified as conferring susceptibility to systemic lupus erythematosus did  
not colocalize with those previously implicated in diabetes, However, three  
of the four regions identified had been previously implicated in other  
autoimmune diseases.

22/3,AB/5 (Item 3 from file: 440)  
DIALOG(R)File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

09820201 References: 36

TITLE: Characterization and specificity of B-cell responses in lupus  
induced by \*Mycobacterium\*\*\* \*bovis\*\*\* in NOD/Lt mice  
AUTHOR(S): Horsfall AC; Howson R; Silveira P; Williams DG; \*Baxter  
AG (REPRINT)\*\*\*

09/308192

CORPORATE SOURCE: CENTENARY INST CANC MED & CELL BIOL, LOCKED BAG  
6/NEWTOWN/TAS 2042/AUSTRALIA/ (REPRINT); CENTENARY INST CANC MED & CELL  
BIOL, /NEWTOWN/TAS 2042/AUSTRALIA/; HAMMERSMITH, KENNEDY INST  
RHEUMATOL/LONDON//ENGLAND/  
PUBLICATION TYPE: JOURNAL  
PUBLICATION: IMMUNOLOGY, 1998, V95, N1 (SEP), P8-17  
GENUINE ARTICLE#: 117QC  
PUBLISHER: BLACKWELL SCIENCE LTD, P O BOX 88, OSNEY MEAD, OXFORD OX2 ONE,  
OXON, ENGLAND  
ISSN: 0019-2805  
LANGUAGE: English DOCUMENT TYPE: ARTICLE

ABSTRACT: A single dose of pasteurized \*Mycobacterium\*\*\* \*bovis\*\*\* administered intravenously to prediabetic nonobese diabetic (NOD) mice prevented the onset of type 1 diabetes but precipitated a systemic 'autoimmune rheumatic disease' (ARD) similar to systemic lupus erythematosus. This syndrome was characterized by haemolytic anaemia, anti-dsDNA and anti-Smith antigen (Sm) antinuclear autoantibodies, increased severity of sialadenitis and glomerular immune complex deposition. Here, we examine the specificity of the autoantibody responses in \*M\*\*\*. \*bovis\*\*\*-treated NOD mice. Large amounts of antibody were detected to the Sm/ribonucleoprotein (RNP) complex, of which the 28000 MW polypeptide appeared to be immunodominant. The IgG subclass involved in the anti-Sm response was primarily IgG2a. Antibodies against dsDNA were also detected, but the subclass of this response was mixed, with IgG2a and IgG2b being present in equal amounts. Together, these findings argue against a role for immune deviation towards T helper type 2 (Th2) responses in pathogenesis of the disease. The anti-dsDNA and anti-Sm reactivities were not mediated by polyreactive antibodies since neither antigen could cross-compete plasma antibody binding to the other in competitive enzyme-linked immunosorbent assay. The role of polyclonal B-cell activation was examined by measuring total gamma-globulin as well as IgG reactive with other nuclear antigens including Ro60, Ro52 and La, which although not a major component of the autoantibody responses in these mice, did show small but significant increases following immunization with \*M\*\*\*. \*bovis\*\*\*. Thus polyclonal stimulation, while likely to be occurring, was not directly responsible for production of anti-Sm antibodies.

22/3, AB/6 (Item 4 from file: 440)  
DIALOG(R) File 440: Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

07870943 References: 33

TITLE: Regulation of autoimmune diabetes: Characteristics of non-islet-antigen specific therapies

AUTHOR(S): Gazda LS; \*Baxter AG\*\*\*; Lafferty KJ

CORPORATE SOURCE: AUSTRALIAN NATL UNIV, JOHN CURTIN SCH MED RES, DIV MOL MED/CANBERRA/ACT 2601/AUSTRALIA/ (REPRINT); AUSTRALIAN NATL UNIV, JOHN CURTIN SCH MED RES, DIV MOL MED/CANBERRA/ACT 2601/AUSTRALIA/; CENTENARY INST CANC MED & CELL BIOL, /NEWTOWN/NSW/AUSTRALIA/

PUBLICATION TYPE: JOURNAL

PUBLICATION: IMMUNOLOGY AND CELL BIOLOGY, 1996, V74, N5 (OCT), P401-407

GENUINE ARTICLE#: VQ232

PUBLISHER: BLACKWELL SCIENCE, 54 UNIVERSITY ST, P O BOX 378, CARLTON VICTORIA 3053, AUSTRALIA

ISSN: 0818-9641

LANGUAGE: English DOCUMENT TYPE: ARTICLE

09/308192

ABSTRACT: Non-islet-antigen specific treatments have been shown to alter the natural history of insulin dependent diabetes in both the non-obese diabetic (NOD) mouse and in recently diagnosed patients. However, concerns have been raised regarding the possibility that non-islet-antigen specific therapy may trade cell mediated autoimmunity for antibody dependent autoimmunity. Female NOD mice at approximately 70 days of age were treated with the non-islet-antigen specific agents complete Freund's adjuvant (CFA) and Bacillus \*Calmette\*\*\*-Guerin\*\*\* (\*BCG\*\*\*) and assayed for the development of antibody mediated autoimmunity at 300 days of age. Autoantibodies to red cells were not detected in any of the \*BCG\*\*\* (n = 19) or CFA (n = 15) treated animals, while 2 of 13 age-matched NOD animals had autoantibodies to red cells, shown by a positive direct Coombs test. Anti-nuclear autoantibodies and complement deposition in the renal glomeruli were not significantly increased in the treated animals as compared to age-matched non-diabetic mice. The relative effectiveness of CFA and \*BCG\*\*\* treatment was examined in terms of the ability of these agents to preserve insulin containing islets. Complete Freund's adjuvant treatment was found to be more effective in preserving insulin containing islets when compared to \*BCG\*\*\* treatment. This study demonstrates that it is possible to inhibit the development of autoimmune diabetes without increasing the probability that treated animals will develop antibody dependent autoimmunity.

22/3,AB/7 (Item 5 from file: 440)  
DIALOG(R) File 440:Current Contents Search(R)  
(c) 2003 Inst for Sci Info. All rts. reserv.

05841984 References: 20

TITLE: \*MYCOBACTERIA\*\*\* PRECIPITATE AN SLE-LIKE SYNDROME IN DIABETES-PRONE NOD MICE

AUTHOR(S): \*BAXTER AG\*\*\*; HORSFALL AC; HEALEY D; OZEGBE P; DAY S; WILLIAMS DG; COOKE A

CORPORATE SOURCE: CENTENARY INST, LOCKED BAG 6/NEWTOWN/TAS 2042/AUSTRALIA/ (Reprint); UNIV CAMBRIDGE, DEPT PATHOL/CAMBRIDGE//ENGLAND/; KENNEDY INST/LONDON//ENGLAND/

PUBLICATION: IMMUNOLOGY, 1994, V83, N2 (OCT), P227-231

GENUINE ARTICLE#: PK799

ISSN: 0019-2805

LANGUAGE: ENGLISH DOCUMENT TYPE: ARTICLE

ABSTRACT: Non-obese diabetic (NOD) mice spontaneously develop organ-specific autoimmunity and are widely used as a model for diabetes. Aged NOD mice also exhibit some features of non-organ-specific autoimmune rheumatic disease such as anti-nuclear antibodies and late-onset haemolytic anaemia. Here, we report that a single dose of  $2.6 \times 10^7$  heat-killed bacillus \*Calmette\*\*\*-Guerin\*\*\* (\*BCG\*\*\*) i.v. in 8-week-old NOD mice prevented diabetes but precipitated a syndrome similar to systemic lupus erythematosus (SLE). Treated mice developed haemolytic anaemia, anti-DNA and anti-Sm anti-nuclear autoantibodies and an increased severity of sialadenitis. Perivascular lymphocytic infiltration in the kidneys and glomerular immune complex deposition were also found. The action of \*BCG\*\*\* appeared to be mediated by an adjuvant-like activity as treated mice showed a substantial increase in reticuloendothelial cell function and enhanced antigen presentation capacity.

Chughal, Polia Michal (Prague)  
37(6):407-412, 1992

09/308192

22/3,AB/8 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00956455

\*MYCOBACTERIUM\*\*\* CELL WALL COMPOSITIONS  
\*MYCOBACTERIUM\*\*\* ZELLWAND ZUSAMMENSETZUNGEN  
COMPOSITIONS DE PAROI CELLULAIRE DE \*MYCOBACTERIES\*\*\*  
PATENT ASSIGNEE:

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INVENTOR:

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PATENT (CC, No, Kind, Date): EP 948350 A1 991013 (Basic)  
WO 9820900 980522

APPLICATION (CC, No, Date): EP 97911956 971113; WO 97AU770 971113

PRIORITY (CC, No, Date): AU 96PO3593 961113

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: A61K-039/04; A61K-038/02; C07K-014/35

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

22/3,AB/9 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00702948

PEPTIDYL COMPOUNDS AND THEIR THERAPEUTIC USE AS INHIBITORS OF  
METALLOPROTEINASES

PEPTIDVERBINDUNGEN UND IHRE THERAPEUTISCHE VERWENDUNG ALS INHIBITOREN VON  
METALLOPROTEINASEN

COMPOSES PEPTIDYLES ET LEUR UTILISATION THERAPEUTIQUE EN TANT  
QU'INHIBITEURS DES METALLOPROTEASES

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 728144 A1 960828 (Basic)  
EP 728144 B1 000119

Searcher : Shears 308-4994

09/308192

WO 9513289 950518

APPLICATION (CC, No, Date): EP 95900237 941110; WO 94GB2471 941110

PRIORITY (CC, No, Date): GB 9323165 931110

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; NL;  
PT; SE

INTERNATIONAL PATENT CLASS: C07K-005/062; A61K-038/55

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200003	381
CLAIMS B	(German)	200003	317
CLAIMS B	(French)	200003	517
SPEC B	(English)	200003	8099

Total word count - document A 0

Total word count - document B 9314

Total word count - documents A + B 9314

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29jan03 10:50:48 User219783 Session D1911.2